## Chapter One

## Introduction

### 1.1 General introduction:

In the economic world of today, the banks are the financial institution in thousand of local town and cities. The bank plays a vital role for the economic development of a country and encourages the habit of saving and development of trade and commerce. Bank helps to mobilize the frizzed and scatter saving of the people and play and intermediary role to make investment of the collected fund in different productive sector. They help to fulfill the requirement of trade and industry in the country and play great role in reducing of poverty, raising employment opportunities and raising people life standard. Banks also arranged remit money from one place to another at very low price by cheque and draft. They buy and sell securities on behalf of customer. Banks are very important to individual business and for country. IN fact, the economic development of country is not possible without banking system. So,, for the economic development, capital formation, supply of money business promotion, industrial and agricultural development banks play vital role in the economic history of any country.

The oldest bank of Nepal is Nepal Bank limited which was established in 1994 B.S. Nepal Rastara Bank was established in 2013 as Central Bank of country. After this, several other commercial banks like Rastria Banjiya Bank, Agricultural Development Bank are also established. Other several Banks were established in Nepal with joint investment such as standard chartered Bank, Nepal SBI Bank, Kumari Bank, Himalayan Bank Ltd, Nabil Bank Ltd. etc.

## According to the Nepal commercial Bank Act 2031 B.S.

"A commercial bank is one which exchange money, deposits money, accepts deposited grant wan and performs commercial booking function."

## According to crowther,

"A Banker is a dealer in debt his own and other's. The bankers business is then to take debts of their people to offer his own in exchange and there by to create money."

## According to R.S. Sayers

"We can define a bank as an institution whose debts (Bank deposit) are widely accepted in statement of other people is debt to each other."

As far as banking function like landing and borrowing are concerned, such activities were conducts even in ancient day. History of Lending and borrowing can be traced back to period of Lichhib king Gunakamdev who had borrowed money from rich people to build the city of Kathmandu in 780 B.C. during the prime minister ship of Ranodip singh around 1933 B.S. a number of economic and financial reforms were introduced. The extablishment of "Tejarath adda" was the out come of the reform. It used to provide loans to the government official and the people against deposit of gold and silver. It had also extended its branches outside Katmandu valley for granting loan. But this office had no right to accept deposit of public and had no characteristics of modern bank.

Generally, an institution established by low when deal with money and creates is called bank. A bank simply carries out the works of exchanging money. Providing loan, accepting deposit and transferring money.

There are various types of bank and one of them is commercial bank. Commercial bank means a bank which operates currency exchange, transaction, accepts deposits, provide loan, and performs dealing relating to commerce except the banks which have been specified for the cooperating agricultural industry of similar other specific objectives.
"The commercial bank has its own role contribution in the economy development, it maintains economics confidence of various segment and extends credit of people." (American institution of Banking 1972:1)
"The some commercial bank was first used to indicate that loans extended were short term loans to business through loans later were extended to consumer's government and other non-business institution as well. In general the asserts of commercial bank lend to be more liquid and carry less than the assets held by other financial intermediaries." (The new encyclopedia Britannica, USA, 1991:3)

Commercial bank is an important bank which provides different services for the economic development of the nation. It has converted each and every aspect of the economy. In the absence of these kinds of services provided by commercial ban, development of various sector of the economy would not be possible.

Thus, in an under developing country like Nepal establishment of commercial bank are very essential for the rapid economy development, although these banks are truly inspired with the objectives of gaining profit. These also established to accelerate common people economic welfare and facility to make available loan to the agriculture, industry and commerce and to provide the banking services to the public and the state.

Joint venture bank effect of strategic alliance arrangement in which two corporations combine forces to from co-operative partnership in other to share risk of development of offset on weakness with strengths of other and like other. In, Nepal JVBS registered under the commercial bank act 2031 B.S. They have joint venture between Nepalese investor and their parent foreign bank occupies certain percentage of share not exceeding 50\% and applies their international management and network.

There were many JVBs established after 2040 B.S. The first joint venture bank is "Nepal Arab Bank Ltd (Renamed as NABIL Bank limited since 1st January 2002). NABIL bank limited gave a new way to the financial sectors. The second JVBs "Nepal Indosuez Bank Ltd" were established in 2043 B.S. After the incorporation of NIBL a new joint venture bank under to the name of "Nepal Grindlays Bank Ltd" was established in 10th magh 2043 B.S. It is the thirds JVBs
of Nepal. "After the established of NGBL, more JVBs were come in to existence after the initiation of government policy of economic liberalization and privatization in 2049 B.S." They are Himalayan Bank Limited (2049), Nepal SBI Bank Ltd (2051). Bank of kathmandu(2052) and so on. These JVBs come into extended ot develop the economy condition of the nations. The foreign commercial banks play a dominant role to mange the join venture bank in Nepal.

### 1.2 Focus of Study

A research work is the process of a systematic and in depth study or search of any particular subject area. An immense research work can be done in any topic or area of the universe. But it is difficult and irrelevant to conduct a research work concentrating on different topic or subject at once. So in this study an attempt will be made only to identify financial weakness and strength of the selected commercial Bank i.e. Nepal SBI Bank Ltd and Nabil Bank Ltd. The main focus of study is to analyze the comparative financial performance of these for 5 years.
"Finance holds a key role on all human activities. Every financial decision is made by observing the income and expenditure of each investment decision." According to the above statement it needs to study commercial Bank in Nepal which are major in financial activities and there financial standard. Best financial performance of certain business organization represent its property but financial performance of the financial institution it selves is prosperity of economic sector.

We know that finance plays significance role in industrialization commercial banks and their performance with respect to their finance is essential study. Best financial performance of commercial banks encourages development of whole economic sector of nation. The researcher's interest to study the financial performance of Nepal SBI bank Ltd and Kumari Bank Ltd. Researcher objective is giving the corrective suggestion in financial performance of financial institution. So study suggests for the further improvement a financial performance of Nepal SBI Bank Ltd and Kumari Bank Ltd.

Development of industry trade and commercial of country depend upon the development of financial sector. Development is directly related with funds and their easy availability use and teh better relationship between the different financial activities. Commercial Bank in developing country like Nepal plays a vital role for the development of financial performance of commercial Bank.

For the objective of this study evaluation of the banks is made with respect to their liquidity activities, profitability, income and expenditure. This study also tries to find out the correlation between specific variable and causes leading two better performance of Bank. There are only two bank selected for the study.

### 1.3 Importance of study

This study is important to many parties in different ways which can be listed as follows:-
$>$ The share holders interested to know how their funds are being utilized and to what extent they are going from their investment. This report will help them by providing such information.
$>$ This study provides detail about the financial performance of firm. The management will be able to know about the weak point and gaps if an of correct them in future.
$>$ Other the share holders and management some other people like deposits, competitors, merchants are interested to know about the performance of organization. This report will help them in very respect.

### 1.4 Background of Nepal SBI Bank Ltd and Kumari Bank Ltd.

Banks are an essential part of the business activities which is established to safe guard people's money and swing the money in making loans and investment. There are several banks operating inside and outside of valley as commercial bank and joint venture bank. Every bank invests cots of money in some profitable business in long run. An investment is the commitment of money that is expected
to generate additional money. Now a day, many kinds of banks are established in our country as commercial bank joint venture Bank. The competition of the banking sector in Nepal has increased. Competition of Joint venture banks is going to be sticks more interest. Arab Bank limited was established in 2041 which is the first joint venture bank under the commercial bank Act 2031. There are many kinds of joint venture banks operating. Out of them, Nepal SBI Bank limited and Kumari Bank Limited are selected for research.

## 1. Nepal SBI Bank Limited

Nepal SBI bank Ltd is a point venture between employee's provident fund and state Bank of India. SBI bank the largest commercial bank of India holds $50 \%$ of the equity. It was established in 2050, It started its operation on 23rd Ashad 2050 (1993) with its head office in Katmandu. The initial paid up capital was Rs. 119.95 million. After the establishment of this bank, generally the monetary transaction between Nepal and India have been carried out through this bank. Since state Bank of India has its network throughout the urban area to remote rural area in India. The bank operates with the objectives of providing loan to industry commerce and trade.

The bank has more than ten branches in various parts of the kingdom. Its corporate office located is Hattisar, Kathmandu and main branch office in Durbar Marg, Katmandu. It has another branches located in New road, and Embassy of Inia extension counter an remounting are outside of the valley, i.e. Biratnagar, Bhairhawa, Pokhara, Jankpur, Itahari branches. To extend more efficient services to its customers Nepal SBI Bank has been adopting innovative and latest banking technology. This has not only helped the bank to constantly improve its service level but has also kept it prepared for future adaptation of new technology. Nepal SBI Bank has just entered into the sixteenth year of successful operation. During these periods, the bank has established itself as one of the leading joint venture banks in the country.

## 2. Kumari Bank Limited

Kumari Bank Limited (KBL) come into existance as the fifteenth commecial bank of Nepal by starting its banking operation from chaitra 21th, 2057 B.S. (April 03,2001) with an objective of providing competitive and modern banking services in the Nepalese financial market. The bank has paid capital of Rs 1078.272 million of which $70 \%$ in contributed from promoter and remaining from public Kumari Bank Limited has been providing wide range of modern banking services in various urban and semi urban part of the country. Its head office is situated at Durbar Marga Kathmandu. It has another branches located in Putalisadak, New road, Gongabu, Darbarmargh and remaining are outside of the valley i.e. Biratnagar, Birgunj, Pokhara, Itahari, Chitwan, Birtamode, Damouli, Bhairahawa, Butwal etc branches.

The bank is pioneer in providing some of the latest. lucrative banking services like E-banking and SMS Banking services in Nepal. The bank always focus on building sound technology driven internal system to cater the charging needs of the customers that enhance high comfort and value. The adoption of modern Globes software, developed by Temens Nr, Switzerland and arrangement of centralized data bus system enables customer to make highly secured transactions in any branch regardless of having account with particular branch. Similarly, the bank has been providing utility bill payment services, inward and outward remittance services and various other banking services.

### 1.5 Statement of Problem

The present situation of Nepal is economically unstable. There is no peace and security in the country. So the investors are discouraged to invest Banking industries are facing problem from external environment, such as political, Legal, economical, and social. Mow a day, unstable polices is major problem of banking sector. The common problem of both joint venture banks and state owned commercial banks are throat cut competition.

The joint venture banks are not interested in granting loan to primary sector of the economy. Banks are active only in the urban sector because they secrete opportunities for maximization of profit. Rural areas are being neglected. There are only few rural development banks active in Nepal while Nepal is full of rural areas.

The following are the helps to gain the answers to unsolved questions regarding the financial performance of Nepal SBI Bank Ltd. and Kumari Bank Ltd. in this study:-

1. What is the current position financial performance of Nepal SBI Bank Ltd. and Kumari Bank Ltd.?
2. Up to what extent the independent variables such as change in various financial rates affect the financial performance of Nepal SBI Bank Ltd and Kumari Bank Ltd.?
3. Whether the Nepal SBI Bank Ltd and Kumari Bank Ltd were established as company act?
4. Whether the profitability of both banks is good?
5. Whether the both banks are using the accounting rules and regulations?
6. Whether the both banks audit their annual reports legally?

### 1.6 Objectives of Study

The main objective of the study is to measure the financial performance of Nepal SBI Bank Ltd and Kumari Bank Ltd. It obtains the true and exact result about the financial performance of both banks. The specific objectives of this study are as under:-

1. To analyze the financial performance portion of the Nepal SBI Bank Ltd and Kumari Bank Ltd.
2. To examine the financial performance of the Nepal SBI Bank Ltd and Kumari Bank Ltd in terms of their profitability.
3. To examine the financial performance of the Nepal SBI Bank Ltd. and Kumari Bank Ltd in terms of their profitability.
4. To examine the financial performance of the Nepal SBI Bank Ltd and Kumari Bank Ltd in terms of their Leverage.
5. To know about the banking activities of both banks whether running at profit or loss.
6. To provide the information about the capacity of bank for paying the loan and interest theorem.

### 1.7 Research Hypothesis

The hypothesis is most powerful tool has invented to achieve dependable knowledge. And hypothesis is an educated guess about problems solution. A logically conjecture relationship between two or more variables expressed in the form of testable statement. Hypothesis is thus a statement about the relationship between two or more variables which need to be investigated for its truth. If the relationship between two variables act as hypothesis predicts then the hypothesis is supported and a new theory has been suggested. And in this study there are two types of variables i.e. dependent and independent. Financial performance is dependent variable and different type of ratio such as liquidity ratio, leverage ratio and profitability ratio are independent variable.

In this research, the researcher is developing the following hypothesis.
$>$ Higher the liquidity ratio, the organization liquidity position is better.
$>$ Higher the debt ratio, it is not gained for organization.
$>$ Higher the profitability ratio, it is good for organization.
$>$ Higher the profitability ratio, so that maximizing profit and decreasing of operating cost.

### 1.8 Limitation of Study

It is natural that all types of study have been conducted within certain limitation. A research is vast study investigatory the subject matt for solving
perceived research problems. Although tails research study has so much advantages aspect, after all, it is conducted under some limitations; it means that the study has done under certain limitation. Therefore, the following are the main limitation of the study:-

1. The study is limited to financial performance.
2. The study is only base on secondary data.
3. The data available in published annual report have been assumed to be correct and true.
4. There is only two types of bank for the study i.e. Nepal SBI Bank Ltd. and Kumari Bank Ltd.
5. The study is only for 5 years.

### 1.9 Organization of Study

The study has been organized into five chapters each deals some important factors of financial performance. The little of each of those chapters is listed below:-

Chapter 1: Introduction of study.
Chapter 2: Review of literature
Chapter 3: Research Methodology
Chapter 4: $\quad$ Presentation and analysis of data
Chapter 5: Summary, conclusion and
commendation

## Chapter 1: Introduction

This is the introduction chapter of this study. This chapter includes background of title, focus of the study, importance of study, background of SBIBL and KBL statement of problem, limitation of the study and organization of study.

## Chapter 2: Review of Literature

This chapter is review of literature with conceptual framework of the financial performance, review of book and thesis work.

## Chapter 3: Research methodology

This chapter contains the research methodology. This chapter deals introduction, research design and population and sample, sampling method, sources of data, method of data collection, tests for analysis and statistical analysis.

## Chapter 4: Presentation and analysis of data

This chapter deals with presentation of data and analysis of the liquidity position, leverage position and profitability position of Nepal SBI Bank Ltd and Kumari Bank Ltd.

## Chapter 5: Summary, conclusion \& recommendation

This chapter includes summary, conclusion and recommendation of the study. Bibliography and appendix are at the end of the study.

## Chapter Two

## Review of Literature

### 2.1 Introduction

This chapter deals with the review of the literature to make the basis knowledge for the study. Review of literature means reviewing research studies or other relevant proposition in related area of the study. Reviewing research studies and once chooses field of study and found what remains to be done in the related area of the study is called review of literature. "The purpose of reviewing the literature is to develop some experts in one's area. To see what new contribution can be made and to receive some ideas for developing a research design." (Wolff, Howard K and Pant, P.R. 1999:30)

Scientific research must be based on the pas knowledge. The previous studies can not be ignored because they provide the foundation to the present study in their words, there has to be continuity in research. A careful and successful review of literature helps the researches in avoiding any duplication of work done earlier. It enables the researcher in discovering important variables relevant to the area of the present research.

Some vision has seen mentioned with the purpose of reviewing the literature. This chapter is dividend into two different sections.

1. Conceptual frame work/ Theoretical frame work
2. Review of related studies

### 2.2 Conceptual framework/Theoretical framework

### 2.2.1 Financial performance

The main indicator of financial performance of business enterprises is the profit earned by the firm profit results mainly from the successful business management. Lost control credit extension risk management in general efficiency of operation.

Financial statement are prepared from the accounting record maintain by the firm. The accounting records are historical and expressed in terms of money. So it is related to past period. It provides reliable information of business activities and their result. It also provides information about resources of business.

Financial statements are the end product or output of an accounting system designed and used in an organization. Te inputs to this system are the business transaction or financial events taken place in the organization. These accounting principles and procedures in the course of their transaction into financial statements.

Financial performance is that managerial activity which has concern with the planning, organizing, controlling and administrating of financial resources of financial statement of enterprise. Again it is basically concerned with analysis of financial statement of enterprise by using different tools and technique financial performance is not also it helps improvement of financial condition in future.

### 2.2.2 Concept of Financial Statement

It was easier to record and check the business transaction for each business in the beginning of civilization because the number of business transaction had taken a very small place. As the human civilization has been growing, human activities have also been increasing remarkable. By the help of financial performance every businessman could show actual business condition to the different parties.
"Financial statement is an organized collection of data organized according to logical and consistent accounting procedures. It may show a position at a moment in time as in the case of balance sheet, may reveal a series of activities over a given period of time in case of an income statement." (Eagene Stalbey, 1954:304)
"Financial statement refers to the two summarized financial report which the accountant prepare usually at the fiscal year of the firm. They are balance sheet
or statement of financial position and the income statement or profit and loss account." (Pandey, I.M., 1999:35)

According to the man Mohan and Goyal analysis and interpretation of financial statement are attempted to determine the significance and meaning of financial statements data so that a forecast may be made of the prospect for future earning ability to pay interest, debt maturities both current as well as long term and profitability." (mohan Man \& Goyal, S.N., 1988:390)

The organization summary of detailed information about financial position and performance of a concern is known the financial statement. The financial statement is prepared at the end of accounting period. The purpose for preparing financial statement is for the periodical review of the activities of the organization and result achieved by the organization. It includes profit and loss account or income statement and balance sheet. Profit and loss account indicates the results of operation for a particular period and balance sheets indicates the financial position regarding assets, total payable and capital. So balance sheet and profit and loss account are important financial statement used in business short explanation of balance sheet and profit and loss account are as follows:-

## 1. Income statement:-

An income statement shows the net result of the business operations during an accounting period. It may include manufacturing and trading account, profit and loss account and profit \& loss appropriation account. An income statement presents the summary of revenues expenses and net income and net loss of a firm. It serves as measure of the firm's profitability.

In their simplest form, the income statements contain two broad categories of items: revenue and expenses. The revenue may by thought of as the level of accomplishment attained by the company while the expenses represent the effort expended to attain that level of accomplishment more. Specifically revenue represent the actual or expected inflow of assets, the settlement of liabilities or
both from a company's primary business activity, while expenses represent the utilization or consumption of assets or incurring of liabilities or both produce the revenue inflow.
"The income statement provides are view of the factors directly concerned with the determination of the net income, the revenue realized from the sales of goods or services and the cost incurred in the process of producing the revenue. They are deducted from the revenue to determine the income from regular operation. In addition, they may be income from other sources and other deductions from income. (John, N. Mayer, 1972:15)

The profit and loss account is the 'score board' of the firm's performance during the particular period of time. The generally accepted convention is to show one year's events in the profit and loss account. Analysis of profit and loss account for several years may reveal desirable or undesirable trends in the profit earning capacity of a business enterprise.

## 2. Balance Sheet:-

Balance sheet is not an account but its a statement of assets and liabilities of business enterprise at a given date. It is a statement, summarizing the financial position of the firm. The balance sheet is prepared at the end of accounting period and after completing the preparation of trading and profit \& loss account. It is the statement of balance sheet of ledger account which is not included in income statement. Therefore it is called balance sheet.
"The balance sheet is a most significant financial statement. It is a statement of assets and liabilities and indicates the financial position of the firm of a particular time. It contains information about economic term of accounting. The balance sheet communicates about assets, liabilities and owner's equity in the firm. In short, it provides information about the financial position of the firm of the end of the accounting period"

The balance sheet contains assets and liability. Liabilities refer to the financial obligation of an enterprise and carrying probable future benefits. Assets are also termed as economic resources owned by an enterprise.

The various items which are shown on liabilities are as:
a. owner's equity/ share holder's equity
b. Long term liabilities.
c. Current liabilities

## a. Owner's equity/ Share holder's equity:-

The sum total of contributor and earned capital is known as the owner's equity. It can be expressed as total assets over total liabilities and it is called net worth. It includes capital reserve and credit balance of P/L account.

## b. Long term liability:-

All the liabilities that are dues beyond one year are known as long term debt or long term liabilities. These are obligation which will mature after a period longer than one year. Company deposit, debenture, long term loan from financial institution, loan on mortgage all are long term liability.

## c. Current liabilities:-

Liabilities which are to be repaid with in one year of the data of balance sheet are takes as current liabilities. It represents the obligation of the business. Sundry creditors, bill payable, bank over draft, accrued expenses, received in advance, cash credit etc. are example of current liabilities.

[^0]The assets side is split up into four major heads which are as follows:-
a. Fixed assets
b. Current assets
c. Investment
d. Other assets

## a. Fixed assets:-

Fixed assets are those physical assets that are to be used in the conduct of the business. The expectation is that they will be used rather than sold. Examples of fixed assets are land and building, plant and equipment, furniture and fixture, tools, vehicles etc.

## b. Current assets:-

Those assets which are in the form of cash or can be converted into cash with in a year are known as current assets. The current assets are assets which are reasonably expected to be realized in cash or sold or consumed during the normal operating business cycle. Cash in hand, cash at bank, sundry debtors, bill receivable, inventory, marketable securities occurred income. Prepaid expenses etc included in C.A.

## c. Investment:-

It represents an expenditure on assets investment outside business to earn interest, dividend or benefits. The intention of investment is to hold the securities for the long run at least longer than a year. Share debenture, bonds are examples of investment.

## d. Other Assets:-

Other assets refer to the payment made in one year, whose usefulness will expire in the future year. They represent assets usually of an intangible nature. These types of assets do not have real value. Example of other assets are preliminary expenses, research and development cost, discount or loss of issue of
share, differed revenue expenditures and debit balance of profit and loss account etc.

### 2.2.3 Financial statement Analysis

Income statement and balance sheet don't all the required information regarding the financial operation of firm. The users of financial statement can get better information about the financial strengths and weakness if the user's prosperity analyzes the information reported in these statements. Analysis of financial statement is the process of critically examines in detail accounting information of the financial statement.

An act assessing financial strength and weakness of an organization through the meaningful search of information contained in financial statement is known as financial statement with specific tool and purpose. In a single sentence, financial statement analysis is an act of selecting, relating and interpreting the information contained in the financial statement with specific purpose and tools.

In order to make financial statement more meaningful, analysis of financial statement is prepared. Analysis of financial statement means a study of relation ship among the carious financial factors. It is a process of classifying and arranging mass data of financial statement. For obtaining a better understanding of the position of business and its performance classifying and arranging are needed. The objective of this process is to growth potential of the business.
"Financial statement analysis attempts to exmine the liquidity, the profitability, the finncial structer and the efficiency of the firm." ${ }^{2}$
"Financial statement analysis is rarely a study of relationship among the various financial factor in business as disclosed by a single of statement and a study of tends of these factors as shown in series of statement. (John V. Mayer, 1974:392)

[^1]In summary, financial statement analysis highlights the strength and weakness of the business under taking by regrouping and analyzing the figures contained in financial statement and by making comparison of various components and by examines their contents. The analysis reveals how for the dreams and ambitious of the tough management haven been converted into reality during each financial year. Hence much information can be attained about various aspects of a business through the analysis which other ways would have been buried in amaze of details.

### 2.2.4 Important of Financial Analysis

In the present time, a large number of parties are interested, trade union, banker \& lender, government and other parties who are directly or indirectly related to the firm for different purposes so there are different users of financial statement. They cook at the same financial statement from different angles. Some of users and their purpose or analysis the financial statements are given below:-

## 1. Management

By analyzing the financials statements, management can draw significant conclusion and determine the new policies and procedures for the concern. It helps them in different ways for knowing the financial position, profitability and adequately of capital structure.

## 2. Investors:-

"The investors may be interested in a cross-sectional analysis i.e. comparing risk and return across all firms in the pharmaceutical industry at a specific point in time." (White, Sondhi and fried, 1994)

Every investor wants the safety of his investment. Therefore, he would like to know whether the business is profitable or not. He also wants to know about the growth potential of his business. The growing potential of business helps in appreciation of the investment.

## 3. Creditors:-

In order to know the fact and actual position of short term liquidity position, the creditors analyze the financial statement. They are interested in knowing whether the concern will be able to pay their debts or not in time. They can easily as certain it by analyzing the financial statement.

## 4. Employees trade union:-

Employees and trade unions are interested in their welfare. They always want better emoluments, bonus, better working condition and security o their job. For this purpose, they analyze the financial statement to know the profitability and financial condition of the organization. They can as certain from the analysis how much bonus and wages are possible from the profit of concern.

## 5. Government:-

Government and government agencies like central statistical organization are interested in financial statement analysis for compiling the industry account and national accounts. For the purpose of assessment of exercise duty, income tax and sales tax, the analysis of financial statements can be used by taxation authorities. It is also helpful in operating the financial policies of government.

## 6. Other parties:-

The analysis of financial statement helps other parties such as economics, researchers, trade associations, journalist and consumer organization by providing essential information about the profitability efficiency, financial condition and future growth of the enterprise.

Finally financial statement analysis is helpful to the decision maker for finding out favorable and unfavorable situation of business firm. So, financial statement analysis is very useful to a number of parties who are related directly and indirectly to the firm. The analysis is important to them for different aspect of their interest.

### 2.2.5 Objective of financial statements analysis

Following are the main objectives of analysis of financial statement:-

## I. To know the profitability of the concern:-

The financial statement analysis is used to as certain it's earning capacity as well as prediction relating to its future earning.

## II. To know the security and solvency of the concern

Whether the firm is in position to meet its short term and long term liabilities or not can be judged by analysis its financial statement.

## III. To know the trend of the concern:-

The purpose of analysis is also to know the trend of business sales, purchase, profit and earning capacity.

## IV. To ascertain the financial strength:-

The purpose of financial statement analysis is to ascertain the financial strength and soundness of business.

## V. To judge the efficiency of Management:-

The plans and policy made by management are efficient or not can be ascertained from the analysis of financial statement.

## VI. To compare financial and operating efficiency of different firm:-

The purpose of financial statement analysis is to help the management in order to make a comparative study of different firms engaged in same business. The financial and operating efficiency can be measured by comparing the different activities of different firms.

## VII. To provide information:-

The purpose of financial statement analysis is to provide different information of different users.

### 2.2.6 Limitation of Financial statements Analysis

Analysis of financial statement has certain limitations which are given below:-

## I. Ignores the qualitative elements:-

Financial statements fail to the qualitative elements like the efficiency of management, efficiency of labor, management, labor relation, reputation of business, charge in management, customer's satisfaction, public relation etc. These elements can not be measure in monitory terms. They are not included in financial statement. So the results of analysis should not be taken as judgment.

## II Not free from bias:-

Influence of personal judgment also affects the analysis and interpretation of financial statement, as it is done by human beings. Analysis is affected by the personal ability and bias of the analyst.

## III. Price Level Charge:-

Financial statements are prepared on the basis of accounting concepts and conventions such as depreciation method, pricing and inventory valuation. The financial statement data may be affected by using various accounting data. In such case, the results obtained by analysis of financial statements will be misleading due to the lack of accuracy in data.

## V Identifies problems only:-

Financial statements analysis can only show the financial problems but it can not suggest definite remedies.

## VI. Not helpful in inter-firm comparison:-

Comparison will become more difficult in the case of adapting different procedures, records and objectives policies for different items of financial statement by different firms. As such the results obtained form the comparison of the financial statement of such firms may be misleading.

### 2.2.7 Financial Statement Analysis Tools

There are different measuring devices or tools of financial statement analysis which are applied in this thesis work as follows:-
(1) Financial Tolls
(2) Statistical

### 2.2.7.1 Financial Tools

Financial analysis is the process of determining the significant operating and financial characteristics of a firm accounting data and financial statement. Among the various financial tools i.e. ratio analysis and trend percentage analysis has been used for present purpose of the study.

## 1. Ratio Analysis

Ratio Analysis is widely used tool of financial analysis. Ratios are calculated for a number of years, which shows the trend of the change position. The ascertainment trend helps us in making estimates for the future. The present ratios are compared with past ratios for analyzing trend. Trend ratio indicates the direction of charge in performance improvement of consistency over year. Ratio is statically yard stick that provides a measure of relationship between two accounting figures.
"Ratio is numerical or an arithmetic relationship between two figures. It is expressing one number in term of other i.e. one figure is divided by another number in order to calculate the ratio." (Jain, S.P. and Marang, 1993:43)

In the word of M.Y. Khan and P.K. Jain, "The term ratio refers to the numerical or quantitative relationship between two items/ variables. A ratio is calculated by dividing one item of the relationship with other." (Khan, M.Y. and Jain, P.K. 1990:117)

Although, ratio analysis is widely used but not one ratio gives the entire picture. Ratio analysis involves basis standard of comparison for a useful interpretation of the financial statements. Similarly a single ratio by itself does not
indicate favorable or unfavorable condition of a firm, unless it is compared to so I appropriate standard. Selection of proper standard comparison is a most important element of ratio analysis. There are many types of ratio can be calculated from the accounting data contained in the financial statement, which are as follows:-
a. Liquidity Ratio
b. Activity Ratio
c. Leverage Ratio
d. Profitability Ratio
e. Other Ratio and indicators

## A) Liquidity Ratio

Liquidity ratio is done to measure the short term financial soundness of the business. The ratio access the capacity of the company to repay its short term liabilities. Liquidity ratio is also an effective source to ascertain whether the working capital has been effectively utilized. Banks and other many lenders for short period are interested n the current assets of the company i.e. short term financial position of the business.

Different types of ratio have been used to measure the liquidity position of an enterprise. In connection with commercial bank, different liquidity ration such as cash and bank balance to total deposit ratio cash and bank balance to current assets ratio, investment on government securities to current assets ratio, current ratio are used to measure the liquidity position of both the banks. Now these ratios are briefly described as under.

## a. Cash and Bank Balance to Total Deposit Ratio:-

Cash is the primary reserve of the banks, By its experience bank keep a certain percentage of deposits in the form of cash for contingent reason. This analysis indicates that the ability of banks funds to cover their current, saving fixed call and other deposits. In additional to this it also asserts that what proportion of total deposits is utilized and what proportion of cash and bank balance remain.

This ratio is calculated $b$ using the following formula:-
Cash and Bank Balance to total deposit ratio

$$
=\frac{\text { Cash and bank balance }}{\text { TotalDeposit }}
$$

## b. Cash and Bank Balance to current Assets Ratio:-

The cash and bank balance to current assets ratio measure of liquidity. The cash and bank balance to current assets ratio measures the proportion of cash and bank balance hold by commercial bank out of its total current assets. Current assets of commercial bank includes cash and bank balance, money at call and short notice loans and advances for commercial banks (i.e. loans, cash credit and overdraft and bills discounted and purchased). Investment on government securities and other interest receivable and other miscellaneous current assets.

This ratio is calculated by using the following formula:-
Cash and Bank Balance to current assets Ratio
$=\frac{\text { cash and Bank Balance }}{\text { Total current assets }}$

## c. Investment on Government Securities to current Assets Ration:-

Investment on government securities is the most liquid form of current assets after cash and bank. Investment on government securities are liquid but less earning assets. Therefore greater investment on government securities mean greater liquidity but lesser investment sources on better earning sector. For earning point of view lesser investment on government securities is preferable but form the liquidity point of view greater investment on government securities is considered better.

Investment on government securities to current assets ratio shows the proportion of investment on government securities of commercial bank out of its total current assets. This ratio is calculated by using the following formula:-

Investment on Government securities to current Assets Ratio

$$
=\frac{\text { Investment on Government securities }}{\text { Total current Assets }}
$$

## d. Current Ratio

Current ratio is the ratio of total current assets to total current liabilities. It indicates the availability of current assets in rupees for every one rupee of current liability. Current assets include all these assets which are in the form of cash or can be converted into cash in the normal course of usual business not exceeding a period of one year. Current assets of commercial bank includes cash and bank balance, money at call and short notice loans and advance for commercial banks, investment on government securities interest receivable etc. Likewise current liabilities include all obligation maturity with in a year and are represented by deposit and other account (i.e. saving, current called and short deposit and other), short term loan, bill payable, tax provision, staff bonus dividend payables and other miscellaneous current liabilities.

This ratio is calculated by using the following formula
Current Ratio=Total current assets/Total current liabilities

## B) Activity Ratio:-

Funds of creditors and owners are invested in various assets to generate sales and profit. The better the management of assets the larger the amount of sales. Activity ratio is employed to evaluate the efficiency with which the firm manage and utilize its assets. These ratios are also called turn over ratio because they indicate the speed with which assets are being converted or turned over into sales. Activity ratio, thus involves relationship between sales and assets. But non manufacturing organization like bank, insurance company provides service but no goods. So that, the ratios relating to inventories and sales do not applicable to those service-oriented. This analysis is related with the measuring the efficiency in assets
management as well as the effectiveness of the investment of resources in the business concern with the help of this analysis, we can easily know whether the funds have been used effectively or not. Activity ratio has been briefly described in this study are presented below:-

## a. Loans and Advance to Total Deposit Ratio:-

This ratio examines to what extent, the commercial banks are able to utilize the deposits fund to earn profit by providing loans and advances. It is computed by dividing total amount of loans and advances by total depositor's fund. Higher ratio represent the greater efficiency or proper utilization of funds provided by the outsiders i.e. deposit. This ratio is calculated y using the following formula:-

Loans and Advance to Total Deposit
$=\frac{\text { Total Loans and Advance }}{\text { Total Deposit }} \times 100$
A higher this ratio indicates commercial banks efficiency in investing its deposits and low ratio indicates commercial banks inability to put its deposits into lending although it helps to maintain sound liquidity position.

## b. Loans and Advance to fixed Deposit Ratio:-

This ratio show the relationship between loans and advances and fixed deposit to determine extends to which fixed deposits are used in advancing loans and advances for generating revenge of the bank. At the same time, loans and advances are the assets, which have highest risk attached and also known as high risk assets. Similarly fixed deposit is the major sources of fund which a bank can utilize to finance long term loans.

Loan and Advance to fixed Deposit Ratio
$=\frac{\text { Total loan and Advances }}{\text { fixed Deposit }} \times 100$

## c. Loans and advances to saving deposit ratio:-

Loans and advances are most profitable among all the assets of the bank, which holds the larges part of the revenue of the bank, which holds the larger part of the revenue of the bank. Whereas deposit collected saving deposits in medium or short term income generating purpose. So that it will be able to pay the interest to its saving depositors and to earn profit.

Loans and advances to saving deposit ratio shows the relationship between loan and advances and saving deposit to determine extend to which saving deposits are used in advances loan and advances for generating revenue to the bank. It is calculated by using the following formula.

Loans and Advances to Saving Deposit Ratio
$=\frac{\text { Total Loans and Advances }}{\text { Total Saving Deposit }} \times 100$
A higher ratio indicates the greater efficiency or proper utilization of funds provides by saving deposits.

## d. Total Investment to Total Deposit:-

This head of analysis measure that how successfully the banks are mobilizing their deposits on investment. Here, the investment includes investment on loans, cash, credit and draft, government securities, bills purchase and discount money at call and short notice where as total deposit includes current fixed saving and call and other deposit. It also assesses the company's financing policy. If they don't have good financing policy them they can't earn proper return. It is calculated by using the following formula:-

Total investment to total Deposit
$=\frac{\text { Total Saving Deposit }}{\text { Total Deposit }} \times 100$

## C. Leverage Ratio:-

Leverage ratio is also known as capital structure ratio. Leverage ratio analysis is the long term solvency of the firm. This ratio shows the manner by which the capital structure is formed. Leverage ratio is also called as debt ratio which show the extend to which the firm is financed by debt. The firm has legal obligations to pay interest to debt holders irrespective of the profit made or losses occurred by the firm. All the creditors see the proportion of the firm supplied by the owners before supplying to the firm.

Leverage ratio has been briefly described this study as follows:-

## a. Debt Equity Ratio:-

This ratio show how many amount of total assets a business concerned financial owners equity (internal equity) and by outside debt (external equity). This ratio is also called debt to net worth ratio. It measures the claim of the creditors and owners against the firm assets. A high debt equity ratio measures the claim of creditors is greater than that of owners. The high ratio means the high risk and more difficult in rising fund for the further need. debt equity ratio is calculated by using following formula:-

Debt Equity Ratio

$$
=\frac{\text { Total Debt }}{\text { Total Shareholders Equity/ Net worth }}
$$

## b. Permanent Capital Structure:-

Permanent capital structure of bank can be defined as the combination of the long term debt share holder's equity. Permanent capital structure can further be classified in following two ratios.
i. Long-term Debt to permanent capital ratio
ii. Net worth to permanent capital ratio
iii. Long-term debt to permanent capital ratio

## i. Long-term Debt to permanent capital ratio:-

This ratio indicates what proportion of the permanent capital of a firm consists of long term debt. Here in this ratio the long term debt is related to the permanent capital of the firm and not merely to the share holder's equity.

This ratio is calculated by using the following formula:-
Long-term Debt to permanent capital ratio
$=\frac{\text { Long - term Debt }}{\text { permanent capital }}$

## ii. Net worth to permanent capital ratio:-

Net worth is permanent capital ratio measures the proportion of firms net worth out of its total permanent capital. Net worth plays vital role in supporting its daily operation and ensuring the long run viability of the banking system. Net worth holds largest proportion out of its permanent capital. so its adequacy plays a catalytic role in up liftmen of the banking status. This ratio is calculated by using the following formula:-

Net worth to permanent capital ratio

$$
=\frac{\text { Net worth }}{\text { permanent capital }}
$$

## c. Total Debt Ratio:-

This ratio shows the relationship between total debt and total assets. In other word, the ratio indicates the relationship between creditors fund and owners capital. In this ratio we find outsider claim, total assets and automatically the rest claim will belong to shareholders. According to khan and Jain, "Debt to total assets ratio is related to the total debt to total assets of firm. The total debt comprised of long term debt plus current liabilities. Total assets consist of permanent capital plus current liabilities." The high debt assets ratio is unfavorable to creditors. It can be calculated as follows:-

Debt Assets Ratio

$$
=\frac{\text { Total Debt }}{\text { Total Assets }}
$$

## D. Profitability Ratio:-

Maximization of profit is the main objective of each and every business concern. It is very necessary to earn maximum profit for the successful running of a business concern. According to the lord Keynes, "profit is the engine that drives the business enterprises." The profit is also important to preserve the existence of business as well as strengthen and expand it.

Profitability is the net and end result of a number of corporate policies and decision. "Profitability analysis essentially related to the profit earned by enterprise during a particular period to various parameters like sales, shareholders equity, capital employed and total assets." (Bhattachrya, S.K. \& Derdon, Johan, 1980:283)

Profitability ratios are designed to provide answer to basically the following questions:-

- Does the firm earn adequate profit?
- What rate of return does it represent?
- What is the rate of return to equity shareholders?
- What is the rate of profit for ratios division and segments the firm? And so on.

A good profitability ratio is of greatest importance and a concern. There are different types of the ratio out of them some important ratio have been briefly described in this study are presented below:-

## a. Return on share holder Equity:-

Return on share holder equity actually measure earning power on share holder's book value investment. This ratio indicates how well the firm has used the resources of owners. The earning of the satisfactory return is the most desirable objective of a firm. The return on shareholders equity reflect the extend to which this objective has been accomplished. This ratio is calculated by using the following formula:-

Return on share-holder profit

$$
=\frac{\text { Net profit after Tax }}{\text { Share holders Equity }} \times 100
$$

## b. Return on Total Assets:-

This ratio actually measures the rate of return on assets on investment. It measures overall effectiveness in generating profit on assets in term of percentage. A higher ratio show the better utilizing of asserts. This ratio is calculated by using the following formula.

Return on total assets (ROA)
$=\frac{\text { Net profit after tax }}{\text { Total Assets }} \times 100$

## c. Return on total Deposit Ratio:-

Return on total deposit ratio shows the percentage of profit earned from the utilization of the total deposit of the bank. It also measures banks efficiency towards its deposit mobilization. Total deposit of commercial bank includes saving fixed, current, call and short deposits and other. Generally, high percentage is the index of strong profitability position and vice-versa. This ratio is calculated by using the following formula:-

Return on Total Deposit Ratio
$=\frac{\text { Net profit after Tax }}{\text { Total Deposit }} \times 100$

## d. Return on investment:-

This head of analysis measure the proportion of the banks have earned satisfactory return on their investment or not. More ever, it reflects how well the firm has invested their funds for profit generating purpose. High ratio percentage represents the appropriate investment policy for profit generating purpose and vice-versa. This ratio is calculated by using the following formula:-

Return on Total investment
$=\frac{\text { Net profit after tax }}{\text { Investment }} \times 100$

## e. Earning per share (EPS):-

Te earning per share show the amount return on numbers of equity share outstanding. High earning per share show profit and shareholders are always interest in this ratio. This ratio measures the efficiency of utilizing shareholders fund in earning activities. This ratio can be calculated as follows:-

Earning per share (EPS)

$$
=\frac{\text { Net profit after tax }}{\text { Total no. of Equity share }}
$$

## E. Other Ratio and indicators:-

A part from above there is some other financial indicators which throw light on various financial of aspect of the bank. Analysis of these indicators will be varying useful in order to assess the financial strength and weakness of the bank. In this study, there are different types of financial indicators which are briefly described as under:-

## a. Interest paid to interest earned ratio:-

A major source of income of commercial bank is generated from spread in two rates i.e. interest charged and interest paid. Commercial bank, receives interest from loan and advances, investment of government securities and treasury bill,
cash credit and over draft. Inter-bank loan investment in foreign bank etc. Similarly, commercial bank. Pays interest to its depositors so commercial bank should mobilized their deposit in such a way that they are able to pay interest to its depositors and able to earn profit. This ratio is calculated by using the following formula:-

> Interest paid to Interest Earned Ratio:-
> $=\frac{\text { Total interest paid }}{\text { Total interest Earned }} \times 100$

## b. Interest Earned to Total investment:-

Interest earned to total investment ratio measures, the percentage of interest earned in relation to total investment of commercial banks. The ratio signifies the mobilization of its investment in interest generating purpose. Since commercial banks are principally concerned with the mobilization of their source in interest generating sector. The ratio plays a significant role in evaluating their efficiency in earning interest. Commercially banks usually earns interest through granting loans and advance and investment on various security or these are the major source of include for the commercial bank. This ratio is calculated by using the following formula:-

Interest earned to total investment ratio

$$
=\frac{\text { Total interest earned }}{\text { Total investment }}
$$

## c. Price Earning Ratio (P/E Ratios):-

$\mathrm{P} / \mathrm{E}$ ratio reflects the investor's perception about the overall risk ness of the bank's earning. It indicates the investor's judgment about the bank's performance. It also tells the price currently bargained by the market participant in common stock for each rupee of earnings. This ratio is calculated by using the following formula:Price Earning Ratio

$$
=\frac{\text { Market Price Per Share }(\text { Closing })}{\text { Earning per share }}
$$

## d. Market value to book value:-

This ratio reflects the price currently being paid by the market for each rupee of currently reported book value. This ratio measures proportion of market value (price) to book value. High ratio is the indicator of strong management and organization. This ratio is calculated by the following formula:-

Market value to book value

$$
=\frac{\text { Market value per share }(\text { closing })}{\text { Book value per share }}
$$

## 2. Trend Percentage Analysis

In today would is dynamic change. Nothing remains constant instead everything changes now and then. This really makes a Herculean task to find enough information about business by way of analysis the financial statement of a single year.

Trend analysis is a mathematical method, which is widely used to find out direction of change based on past assumption. In financial analysis, direction of change over a period of year is of curie importance. Trend analysis shows the percentage change in several successive years instead of between two year. More ever it examines whether the financial position of a first is improving or determining over the year.

According to J.C. Van Horne and J.M. Wachowicz "An analysis of percentage financially statement where all balance sheet or income statement figure for a base year equal to 100 percentage and subsequent financial statement items are expressed as percentage of their values in the base year" (Van Horne, J.C. and Wachowicz, J.M. 2002:145)

However, as the base year is always changing, so it become difficult to interpret the series of percentage change and its problem becomes more evident in case of inter firm comparison. So the percentage change may be better expressed assuming the first year as the base year. Trend percentage can be computed by using the following formula:-

Trend Percentage $=\frac{\text { Yearly Amount }}{\text { Base year's Amount }} \times 100$
In this section, researcher is going to analysis of the significant items contained in the financial statement by the mean of trend with the purpose of find out the actual position of Nepal SBI Bank Ltd. and Kumari Bank Ltd.

### 2.2.7.2Statistical Tools

Some statistical tools are also been used for the analysis of data. In this study different types of statistical tools are used. They are arithmetic mean, standard deviation, coefficient of variation correlation coefficient analysis, regression analysis and hypothesis testing. While analyzing financial performance with the help of statistical tools such analysis heep to draw. Conclusion regarding which of the organization is better managed. If statistical tools indicate that there are some tools aspects and then it helps management to take corrective action.

There are different types of statistical tools which are as follows:-

## 1. Average (Arithmetic mean)

The average is the measures which condense a huge mass of data into single value representing the whole data. Averages are the typical value around. Which most of the data rend to cluster? There are different types of average, but in this study, only arithmetic means is taken for the analysis of data. Arithmetic means of given set of observation is their sum divided by no. of observation. It can be computed as follows:-
$\operatorname{Mean}(\bar{x})=\frac{\sum x}{N}$
Where, $\bar{x}=$ Arithmetic Mean

$$
\begin{aligned}
& \sum x=\text { Sum of value } \\
& \mathrm{N}=\text { No. of observation }
\end{aligned}
$$

The purpose for computing the mean for set of observation is to obtain a single value which is representative of all the items and which are mind can be graphs simply and quickly. The single value is the point of location around which the individual items cluster.

## 2. Standard Deviation (S.D.)

Karl Pearson introduced the standard deviation concept in 1823. It is denoted by the Greek letter sigma ( $\delta$ ). The standard deviation is the absolute measure of dispersion in which the drawbacks presents in other measure of dispersion are removed. It is said to be the best measure of dispersion are removed. It is said to be the best measure of dispersion as it satisfied must of the requisites of a good measure of dispersion. The value of the standard deviation depends on upon whether the other return data are scattered or clustered around the central value. If the other value are scattered from the central values it is regarded more volatile or risky. There are standard deviation will be higher. Similarly, if the value is clustered around the mean, the return distribution is regarded less volatile or less risky, there are standard deviation will be lower.

Standard deviation is defined as the positive square root of the mean of square of the deviation taken from the arithmetic mean. It is calculated by follows:-

Standard Deviation (S.D.) $\delta=\sqrt{\frac{\sum(x-\bar{x})^{2}}{N}}$
Where, $\mathrm{N}=\mathrm{No}$. of observation

The standard deviation measures the absolute dispersion or variability of a distribution. A small standard deviation indicates a high degree of uniformity or homogeneity of the data. A large standard deviation indicates just the opposite.

## 3. Coefficient of Variation (c.v.)

Standard deviation discussed above is an obsolete measure of desperation. It measures the variation which is expressed in term of original units of series. Coefficient of variation is relative measure of dispersion based on standard deviation. It is obvious that C.V. is independent in unit. Hence, C.V. is suitable measures for comparing variability of two series (or set of data of distribution) with the same or different units. It is calculated as follows:-
C.V. $=\frac{\delta}{x} \times 100$

That series (or group) for which has been the greater c.v. is said to be more variable or conversely less c.v. is said to be less variable or more consistent, more uniform more stable or more homogenous.

## 4. Correlation coefficient Analysis:-

Correlation coefficient analysis is one of the most widely used and also one of the most widely abused statistical measure, it measured the degree of relationship between two variables. In other words the term co-ordination indicates the relationship between two such variable in which changes in the value of one variable the value of the other variable also change.

Correlation coefficient is calculated when it is believed that there is causal and effect relationship between two variables. One variable will be causal variable and another will be its effects. Causal variable is also called independent variable. The degree of change on dependent variable due to change on caused variable
depends upon degree of correlation between terms. The correlation is denoted by r and is calculated by using the following formula:-

Correlation coefficient(r) $=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}$
Where,

$$
\begin{aligned}
& \mathrm{x}=\mathrm{X}-\bar{X} \\
& \mathrm{y}=\mathrm{Y}-\bar{Y}
\end{aligned}
$$

Interpretation of correlation coefficient(r). The value of 'r' exists between +1 and -1 following generals rules are given which would help in interpreting the result.

1. When $\mathrm{r}=+1$, there is perfect positive correlation between the two variables.
2. When, $\mathrm{r}=-1$, there is perfect negative correlation between the two variables.
3. When, $r=0$, the variables are uncorrelated. In other word there is not linear relationship between two variables.
4. Closer the value of 'r' to +1 closer the relationship between two variables. Closer the value of 'r' to $u$ lesser the relationship.

One very convenient and useful way of interpreting two value of coefficient of correlation between two variables are used to square of coefficient of correlation, which is called coefficient of determination ( $\mathrm{r}^{2}$ ). Interpretation of coefficient of determination is very simple. For example, when $r=0.8$, the coefficient of determination $\left(\mathrm{r}^{2}\right)$ will be $(0.8)^{2}=0.64$. It means $64 \%$ change on dependent variable is explained by a change in independent variable. The remaining $36 \%$ charge is unexpected. It means the change is caused by other variables.

## 5. Regression Analysis

Literal meaning of regression is stepping or returning back to the original position. The theory of regression analysis was first developed by Sir F. Galton.

Regression analysis is used as a tool of determining the strength of relationship between two variables. Thus it is a statistical device with the help of which we can estimate or predict the value of one variable when the value of another variable is known. The unknown variable which we have to predict is called dependent variable and the variable whose value is known is called independent variable. The analysis used to describe the average relationship between two variables is known as simple linear regression analysis.

Regression lines expressed in terms of algebraic relation are known as regression equation. It can be calculated as follow: -

1. Regression equation of $y$ on $x$

$$
\begin{equation*}
y=a+b x . \tag{i}
\end{equation*}
$$

Here, $a=$ intersect of the line
$b=$ slope of the line
$\mathrm{x}=$ independent variable
$\mathrm{y}=$ dependent variable

## 6. Hypothesis Testing

Hypothesis testing is the important tools of testing the significance of variables. Hypothesis means the presumption or quantitative statement of the population parameter which may be true or false. In order to make proper decision about the quantitative statement of the population testing of hypothesis technique is used. .Note that, the testing of hypothesis is carried out by using sample information.

According to Webster," tentative theory or supposition provisionally adopted to explain certain facts to guide in the investigations of others ". However, in statistic hypothesis means a statistical statement about the value of one or more parameters of the population.

This study has been under taken to access the financial performance of two joint venture bank i.e. Nepal SBI Bank Limited and Kumari Bank Limited.

Depending upon the size the sample chosen to analyze the financial performance of the concerned loans. Students't' test is to be adopted for the hypothesis testing. For this study financial data are adopted from fiscal year 2060 to 2064 of two banks. Therefore the size of the sample through out this study process is 5 (i.e. $\mathrm{n}=5$ )

### 2.3 Review of Related Literature

Review of literature means reviewing research studies or other relevant proposition in the related area of the study. In this section review of book, reviews of thesis work are included.

### 2.3.1 Review of Book

In this section different view expressed by different persons authors, profession, function activities, financial position, performance etc. of Nepalese commercial bands have been reviewed.

A hand book of banking, written by Sarita and Bhuvan Dahal. Areadable introductory hand book with a general overview of banking business dividing in to different topics such as, introduction of banking, banking operation liquidity, profitability loan and capital management of bank .It is designed for an introductory course for students. Bankers, business man and others. This book present a gradual development of banking business in Nepal, the current position of the banking business in Nepal, current operation, financial and management strengths and weakness of banking business in Nepal .

The author expresses their view of the financial position of the commercial banks in Nepal as under.

All the joint venture banks are running at profit but two major banks i.e. Nepal Bank Ltd. and Rastriya Banigya Bank are incurring huge lossess.More over an the joint venture banks do not have strong financial losses in respect of capital adequacy and EPS.Non operating assets and interest suspense of all the banks including the best banks like NABIL and SCB are also increasing. This is a serious problem of banking in Nepal because bad quality of assets load bankruptcy of many banking in South -East Asia.

There is a rumor that some banks are manipulating in the classification of credit and loss provisions being made. If the rumor is trod, their balance sheet is not presenting the true picture. In the long run, this will prove to be very costly for depositor in particulars.
"Portfolio behavior of commercial banks in Nepal" is written by Suniti Shrestha, a useful readable book prepared on the thesis version of PhD degree .This book is useful to all students, researchers, bankers, general public etc. This book covers all the aspects of the commercial bank in Nepal .Such as introduction of banking System historical background of banking system ,financial performance of commercial bank etc the author has conclude about the financial performance of the commercial bank in Nepal as under .
"Capital adequacy ratio reveals that Nepalese banks are below the standard set by government foreign banks have higher capital adequacy ratio but has been declining every year".
"Debt equity ratio of commercial banks is more than $100 \%$ in most of the time period under study. It leads to conclude that the commercial banks are highly leveraged and highly risky."
"Return ratio of all banks show that most of the time, foreign banks have higher returned the Nepalese banks."

The performance evaluation of different commercial banks shows that the local banks have very poor performance and both banks i.e.Nepal bank Ltd and

Rastriya Banijya Bank have low capital base and a heavy amount of non performing assets .But on the other hand, newly opened foreign based commercial bank has better financial performance then the domestic banks operating under same environment. The reason behind it lie not only in their financial decision making system, but main other internal factors namely the organization, staffing work technology, work culture and the attitude of staff .It has been found that human resources management has been the main problem of the Nepalese banks and their deficiencies are obviously reflected in their financial performance.

In the book of western and Boigham, they describe the if management is to maximize the value of this firms stock price ; it must analysis the weak and strength of the firm which is possible from the ratio analysis which had to access financial performance in comparing with the firm and other firm .Financial statement analysis involves a comparison of firms performance with that of other firm in the same line business. The analysis is used to determine the firm in the same line business. The analysis is used to determine firms financial position in order to find out strength and weakness and to suggestion that might useful to firm to take advantage to its strength and correction to its weakness. Financial statement analysis is to evaluate ate attractiveness of the firm as an investment by examining its ability to meet its current obligation and expected financial obligation. However, financial analysis is useful in both way to anticipate future condition and more important as a starting point for planning action that will influence the future course of event. But most important and most difficult input to successful ratio analysis is the judgment used when interpreting the result to reach an overall conclu8sion about the firm's financial position. So, ratio analysis is used but analysis should be aware of these problems an make adjustment as necessary.

### 2.3.2 Review of Thesis work

In this section different types of related research studies have been review because chance of duplication will be avoided from present study and some new and change can be created for achieving the objectives. Some of the relevant research studies have been mentioned below:

Mr. Keshav Raj Joshi in his unpublished masters thesis, "He view that the liquidity position of commercial bank is satisfactory. He found that comparatively the local commercial bank is satisfactory. He found that comparatively the local commercial banks have been found relatively highly leveraged compared to the joint venture banks Loans and advance have been the main form of investments . Two third of assets have been used for earning purpose -profitability position of NABIL Bank is strength that the other commercial bank.

Radha Bir Kapadia, "A comparative study on financeal performance of NABIL and standard chartered bank. In this study he found that interest coverage ratio of both the bank is not satisfactory over the finding period. Price earning ratio of NABIL bank is an average higher with vonstistency than that of SCBL which reflects that NABIL bank better performance for the grown in earning that SCBL. The study shows efficiency in utilizing the resources is satisfactory comparatively NABIL bank has good and higher liquidity position and higher leverage than SCBL.

A research study made by M.P. Khaitiwada in his unpublished master's thesis, "A comparativestudy of the financial performance of NABIL and NSBL." Concluded on their deposit utilization that the cash and bank balance to total deposit of NSBL has higher proportion than of NABIL. It means NSBL keeps more amount of cash in order to meet its cash requirement of its depositors and for other contingency than that of NABIL keeping more idle cash balance is an profitable.

Manoj Bhakta Acharya has done research on "Dividend policy and practices in commercial banks. A comparative study of Nepal SBI bank and NBBL." in 2001 and focuses on the dividend policy and practices adopted by the sample banks with a view to provide workable suggestion which may be helpful to formulation of optional dividend policy and maximize the stock price and to take some other appropriate dividend strategies and the specific objectives set by the researcher is to highlighted the dividend practice of the banks to refleds (identifying) the relationship between dividend per share and other financial indicators such as earning per share, net profit net worth and market price of stock, to know if there is any uniformity among dividend per share, earning per share and dividend payout ratio of the commercial banks sampled to examine whether or not dividend influence the liquidity position and share prices of same banks, to provide a possible guideline and a package of suggestion on the basis of finding and analysis to overcome various issues and gaps.

Ganenra Acharya's study entitled, "A comparative study of financial performance of joint venture banks in Nepal especially on the NABIL and NIBL." Pointed out that the liquidity position of both the banks were below the standard of $2: 1$. The study further found that the banks are utilizing their assets more efficiency. Capital structure was highly leveraged. Capital adequacy ratio of NIBL as better than that of NABIL and profitability position of both banks was recorded as satisfactory.

## Chapter Three Research Methodology

### 3.1 Introduction

Research methodology is a systematic and scientific method or technique that is used in handling a problem by the researcher. So, it is another important aspect of thesis writing. In other words, research methodology provides various tools and techniques as regard to the problem and also provides the various instructions as regard to the methods and process associated with the over all study. IN this way research methodology is the process of arriving to the solution of the problem through planned and systematic dealing with the collection analysis and interpretation of fact and figure. Research methodology is very helpful in identifying the research problem. In fact, research is an art of scientific investigation. For the purpose of achieving the objective the detailed research methodology used in this study and highlighted in this chapter.
"Research is a scientific method of finding out solution to a problem where as research methodology refers to the Various sequential steps to adopt by a researcher in studying a problem with certain objective in view." ${ }^{3}$

[^2]Research methodology covers the wide range of the investigation. According to nature of the phenomena various statistical and financial tools and techniques are applied to find out the solution of the problem. Research methodology is composed by two words research and methodology. In common sense research means to search for knowledge, facts information tat is still unknown. Like wise methodology is a scientific and systematic process that consists of various tools and technique that can be used to solve, the problems. Therefore, research is a Systematic and organized effort that includes the scientific method of acquiring knowledge. The scientific and systematic methodology various authors and writers have defined research methodology in numbers of ways. Some of the definitions are as follows:-
"Research is systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answers to the problem. This is the entire process by which we attempt to solve problems or search the answers to questions is called research."
"Research methodology is a way to systematically solve the research problem it may be under stood as a science of studying how research is done systematically." ${ }^{4}$

[^3]From the above definition, research is the scientific and systematic process. It includes all types of investigation solution to the problem. Research also helps to discover new ideas, knowledge in a particular area of interest. Research methodology refers to all those technique that the researches use in performing research operation. The basic objective of this study is to highlight the financial performance of NSBIBL and KBL during the period of 5 years from the fiscal year 2060/61 to 2064/65. In this chapter, reseacher design, population and sample, sampling method, source of data collection, tools and technique for analysis are included.

### 3.2 Research Design

The research design is a systematic and conceptual structure with in which the study is to conduct. Research design is a clear map of all types of investigation. The appropriate research design is also required for the achievement of desired objectives of the investigation it can be compared with the blue print of the procedures and techniques, which guide to the study, "Research design is a plan for the collection and analysis of data." Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure," It presents a serious of guide posts to enable the researcher to progress right direction in order to achieve the goal. The design may be as specific presentation of the problem, formulation of hypothesis, conceptual clarity and methodology, survey of literature and documentation, bibliography, data collection, interpretation, presentation and report writing.

Researcher design is the conceptual structure with in which the research process is performed. Design setup to the frame work for adequate test of the relations among variables. Research design tells us about what observation to make then and how to analyze the quantitative representation of the observation. In
thesis study, research is based on the recent historical data and covers the fiscal year 2060/61 to 2064/65. The data has been analyzed using various financial and statistical toots and techniques. These tools help to know the financial performance of NSBIBL and KBL. So the research design is historical and explanatory types as regards these two banks.

### 3.3 Population and sample

## Population:-

The Population or universe consists of no of unity usually very large Population denotes the aggregative form. Population refers the totality of all observation. In other word, the Collection or aggregative of objects or the set of result of an operation it called population.

Sample:-
This technique of taking part of the Population for a studying purpose is known as sampling of a representative part of population which we select for the purpose of investigation is called a sample. It is a tool which enables us to draw conclusion about the objects or items that one included in the sample. It refers to the chosen part of population.

In this study, we take the whole joint venture bank as population under banking industry. NSBBL and KBL are as sample and information data of last 5 years is also a sample.

Out of various method of selecting a sample, judgment sampling was followed in order to choose NSBIBL and KBL among the available commercial banks in Nepal. More ever NSBIBL and KBL have been taken as sample.

### 3.4 Sampling method

There are different types of sampling method but we only use purposive or judgment sampling in this study judgment sample are selected form the population through researches intention or on some3 other subjective basis. The selection of the sample is deliberate and purpose. It is not random. In the judgment sampling subject are selected as the basis of their experience in the subject investigated.

### 3.5 Source of Data

Data collection is the first step or first part of any research work. There are mainly two types of data are as follow:-

## 1. Primary Data:-

Primary data is that data which are collected direct personal interview, indirect oral interview, information from correspondence, questionnaire to person and soon. These types of data are original characters.

## 2. Secondary Data:-

The data which are not originally collected but obtained from some and unpublished sources are secondary data. In other words, data collected by some one else used already and are made available to other in the firm of published statistic are known as secondary data.

The study basically depends upon the secondary data. The major secondary source of data for this study is annual audit reports published by NSBIBL and KBL. Some to the journals economic survey report and banking news have been taken into consideration for this study.

### 3.6 Method of Data Collection

In course of the research work, after identification of data, the required data for the study have been gathered through procedure which is as follows:-
a. First of all, annual reports of NSBIBL and KBL were downloaded from their respective website to pen drive and printed letter on.
b. Financial statement is published by bank from time to time, authors generals reports some previous study from made regarding in this study. News paper, Journalist book and articles were collected.

### 3.7 Tools and Techniques for Analysis

Main objective of this study is comparative analysis of financial performance of two commercial banks i.e. NSBIBL and KBL. To evaluate the financial performance of the banks, different types of method of technique are available. So various financial and statistical tools and technique have been used in these studies which are as follows:-
A. Ratio Analysis
B. Trend Analysis
C. Standard deviation
D. Correlation coefficient analysis
E. Coefficient of variance
F. Average
G. Regression analysis
H. Hypothesis testing

### 3.7.1 Ratio Analysis:-

An arithmetic relationship between two figures is known as ratio. Ratio analysis is a powerful tool of financial analysis. In financial analysis is a ratio is used as a yard stick for evaluating the financial performance of a firm. The absolute accounting figure presented in a financial statement does not provide meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant
information. Therefore, the relationship between two accounting figures expressed mathematically, is known as financial ratio. Ratio helps to summarize the large quantities of financial data and to make qualitative judgments about the firm financial performance.
"Ratio is the numerical or an individual relationship between two figures. It is expressing one number in term of another in order to calculate one ratio." (Jain, S.P. and Narang, K.L. 1998:416)
"A ratio is a yardstick provides a measure of relationship between two accounting figure. It's defined or the indicated quotient o two mathematical two expression and as the relationship between two or more thing." (Pandey, I.M., 1988:501)

So, ratio analysis is the expression of the relationship between two items either from balance sheet or from income statement of or from both statement ratios is useful technique to interpret the financial statement. So that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined.

In this research work, various analyses have been done or the basis of these tools such liquidity leverage ratio, activity ratio, profitability ratio and other ratio etc.

### 3.7.2 Trend percentage Analysis

Trend percentage analysis is another financial tool of analyzing financial performance. It reflect the large in financial statement two periods stabling a base year and expressing other year in terms of the base year can easily study these. So trend analysis is a device for measuring changes in the magnitude of the phenomena from time to time or even from place to place. The careful study of relative changes that have taken place in the post helps to fore cast the future trend and tendencies.

The trend percentage statement also known as trend ratio is an analytical device which examines whether the financial position of a firm is improving or determining over the year. In this research work, this tool is used to find out the direction of charge of major activities such as deposit net worth, investment, operation income, total expenses, net profit and interest learning in comparison to first year (base year) of study growth trend of activities (i.e. deposit, net worth, investment etc.) for four successive year can be calculated.

### 3.7.3 Average (Arithmetic Mean)

The most popular and widely used measure of representing the entire data of the one value is known as arithmetic mean its value is obtained by adding together all items and by dividing this total by the no items. The purpose for computing the mean value for set of observation is obtaining a single value which is representative of all the items and which the mind can group simply and quickly. The single value is the point of location around which the individual items clusters.

Higher the value of mean, the profitability position is regarded as sound. The calculation of average is necessary due to following reasons:-

To get a single value this represents of the characteristics the entire mass of data. They set unnecessary details of the data and put forward a concise picture of the complex phenomena under investigation. Single average reduces the mass of data to a single figure. They are very helpful for purpose of making comparative study.

### 3.7.4 Standard deviation

It measures the variation of the mass of the figures in a series of an average. It is absolute measure of dispersion. So, it is calculated to supplementary of the relative measure coefficient of the variation. It is usually denoted y ' $\delta$ (sigma).

Standard deviation is the positive square root of the arithmetic mean of the square of given observation from the arithmetic mean.

### 3.7.5 Coefficient of Variation

This is the relative measure of dispersion of risk ness of return based on standard deviation and mean coefficient of variation is the percentage variation in mean and standard deviation being considered as the total variation in the mean C.V. suitable measure for comparing variability of two series (or set of data or distribution) with the same or different units. The higher C.V. indicates higher desperation.

### 3.7.6 Correlation coefficient Analysis

Correlation coefficient analysis measures the relationship between two or more variables. In other word it helps us in analyzing the co-variation between two or more variables. In this study, it is used to find the relationship between total deposit and total investment, interest earned and interest paid, interest earned and operating profit. By finding the relationship between the above mentioned variables. The researcher will able to know whether the variables are positive correlated or not coefficient of correlation is denoted by 'r'.

Coefficient of correlation is always lies in +1 to -1 . When ' $r$ ' will be +1 , there will be perfect positive correlation between two variables. When 'r' will be 1, there will be perfect negative correlation between two variables. When 'r' will be ' o ', there will be no correlation between two variables.

### 3.7.7 Regression Analysis

Regression analysis is one of the most powerful statistical tools, which being used in the estimate of strength of relationship between two variables. A line of regression gives the best estimate of one variables of or one variable for any
given value of the other variable. So there are two lines of regression referring as the line of regression of $y$ and $x$ and the line of regression ox and $y$ respectively. If two lines of regression coincide with each other, the correlation is perfect and if they cut each other at right angle, the variables are uncorrelated.

### 3.7.8 Hypothesis Testing

Student 't' test is used as the major statistical tools out of the various techniques of hypothesis testing. Especially this tool is used in this research study to test the significance of the difference between different related variables to determine the relative position between them.

## Chapter Four

## Presentation and Analysis of Data

### 4.1 Introduction

This chapter presents the data and facts, which is related to different aspects of Nepal SBI bank limited and Kumari Bank Limited. These data are collected from various sources. These available data are tabulated; analyzed and interpreted that financial forecast of banks can be done easily. The main objective of presentation and analyzing data are financial performance and interpretation is to highlight the strength and weakness of the business. This analysis based on the financial statement of the NSBIBL and KBL from the fiscal year 2060/61 to $2064 / 65$. In order to find out the strength and weakness of those two banks in terms of their financial performance various ratio trend analysis correlation, regression analysis, hypothesis testing etc. are computed.

### 4.2 Ratio Analysis

Ratio analysis is a powerful tool of financial analysis. A ratio is defined as the indicated quotient of two mathematical expressions and as the relationship between or more things. In financial analysis, a ratio is used as a bank mark for evaluating the financial position and performance of a firm. Ratio provides clues to the financial position of a concern. These are the pointers or indicators of financial strength soundness position or weakness of an enterprises one can draw conclusion about the exact financial position of a concern with the help of ratios.

In this research work, ratio analysis of two banks i.e. NSBIBL and KBL has been grouped into five categories.

### 4.2.1 Liquidity Ratio

The purpose of these ratios is to test the solvency positions for the payment of short term liabilities. Solvency position or liquidity denotes ability for payment of short term liabilities. It measures the ability of a firm to meet its short-term obligations and reflect the short-term financial strength. The liquidity ratios are analyzed as follows:-

## 1. Cash and Bank Balance to Total Deposit Ratio:-

Cash and bank balance to total deposit ratio measures the availability of bank highly liquid funds to meet its unanticipated calls on different types of deposited. This analysis indicates the ability of banks fund to correct their current saving call and other deposits. Cash and bank balance includes cash balance and balance with bank.

Cash and bank balance to total deposit ratio of NSBIBL and KBL are presented by following table.

Table No. 4.1
Cash and Bank Balance to total Deposit

| Fiscal Year |  |  |  | (Rs. in Million) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NSBIBL |  |  | KBL |  |  |
|  |  <br> Bank <br> Balance | Total Deposit | $\begin{aligned} & \text { Ratio } \\ & \% \end{aligned}$ | Cash and Bank Balance | Total Deposit | $\begin{aligned} & \text { Ratio } \\ & \% \end{aligned}$ |
| 2004/05 | 812.90 | 15839.01 | 5.13 | 1435.18 | 17532.4 | 8.19 |
| 2005/06 | 1051.82 | 15506.44 | 6.78 | 1264.67 | 18619.37 | 6.79 |
| 2006/07 | 1144.77 | 13447.65 | 8.51 | 1979.21 | 21007.37 | 9.42 |
| 2007/08 | 970.49 | 14119.03 | 6.87 | 2001.19 | 22010.34 | 9.09 |
| 2008/09 | 559.38 | 14586.61 | 3.83 | 2014.47 | 24814.00 | 8.12 |
|  | Average S.D. $\delta$ ) C.V. |  | $\begin{aligned} & 6.22 \\ & 1.79 \\ & 28.78 \end{aligned}$ | Average ( $x$ ( ${ }^{\text {S }}$ S.D. $\delta$ ) C.V. |  | $\begin{aligned} & \hline 10.07 \\ & 1.36 \\ & 13.50 \end{aligned}$ |

Source: Appendix I, II (A, B) (A)
The above Table 4.1 shows that the ratio of cash and bank balance to total deposit of two banks for fiscal year 2060/2061 to 2064/2065. Ratio percentage of NSBIBL is $5013,6.78,8.51,6.87$ and 3.83 and KBL is $10.50,8.12,11.69,10.69$
and 10.65 for the five year respectively. Average proportion of NSBIBL and KBL is $6.22 \%$ and $10.07 \%$ respectively. It shows that the average ratio of KBL is higher than NSBIBL. So, ti indicates that NSBIBL is better utilization of its deposits and KBL is strong liquidity position of firm. KBL is less successful to utilize the fund of total deposit than NSBIBL. C.C. of NSBIBL and KBL is $28078 \%$ and $13.50 \%$ respectively. It indicates that KBL is less risky than NSBIBL or KBL is more consistent than NSBIBL because KBL has lowest C.V. than NSBIBL.

## 2. Cash and Bank Balance to current Assets Ratio:-

Cash and Bank Balance are two major components of current Assets. These are ready cash, which can be used any time and any where according to the need of firm. Cash and bank balance is the most liquid form of current assets Bank must keep cash and bank balance in its vault to meet requirement of its call on time depositors and other official expenses. Cash and Bank balance includes cash balance and bank balance.

Table of Cash and bank balance to current assets of NSBIBL and KBL as below:

## Table No. 4.2

Cash and Bank Balance to current Assets
(Rs. in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Cash \& Bank <br> Balance | Total Current Assets | Ratio $\%$ | Cash and Bank Balance | Total Current Assets | Ratio $\%$ |
| 2004/05 | 812.90 | 13160.60 | 6.18 | 446.70 | 3423.12 | 13.05 |
| 2005/06 | 1051.82 | 13312.40 | 7.90 | 338.90 | 3340.25 | 10.15 |
| 2006/07 | 1144.77 | 13868.3 | 8.25 | 926.53 | 7517.89 | 12.32 |
| 2007/08 | 970.49 | 14244.04 | 6.81 | 1226.92 | 11144.33 | 11.01 |
| 2008/09 | 559.38 | 14971.80 | 3.74 | 1340.49 | 13967.79 | 9.60 |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | $\begin{aligned} & \hline 6.58 \\ & 1.78 \\ & 27.05 \end{aligned}$ | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | $\begin{aligned} & 11.23 \\ & 1.45 \\ & 12.91 \end{aligned}$ |

Source: Appendix I and II (A, B)

The above Table 4.2 shows that the ratio of cash and bank balance to current assets of two banks for fiscal year 2060/61 to 2064/65. Ratio percentage of NSBIBL is $6.18,7.90,8.25,6.81,3.74$ and KBL is $13.05,10.15,12.32,11.01$ and 9.60. Average proportion of NSBIBL and KBL is $6.58 \%$ and $11.23 \%$ respectively. It shows that KBL is maintains the highest cash balance then NSBIBL. C.V. of NSBIBL and KBL is $27.05 \%$ and $12.91 \%$ respectively. So KBL is more consistent then NSBIBL because of lowest c.v. of KBL.

## 3. Investment on Government Securities to current Assets Ratio:-

Investment on government securities to current assets ratio indicates that the proportion of investment on government securities of commercial bank out of total current assets.

This ratio is calculated and presented by following table:-
Table No. 4.3

Investment on Government Securities to current Assets Ratio
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Investment on Government Securities | Current Assets | Ratio <br> \% | Investment on government Securities | Current <br> Assets | Ratio <br> \% |
| 2004/05 | 2732.96 | 13160.60 | 20.76 | 300 | 3423.12 | 8.76 |
| 2005/06 | 4120.29 | 13312.40 | 30.95 | 224.40 | 3340.25 | 6.71 |
| 2006/07 | 3588.77 | 13868.38 | 25.87 | 400 | 7517.89 | 5.32 |
| 2007/08 | 3672.63 | 14244.04 | 25.78 | 2001.10 | 11144.33 | 17.95 |
| 2008/09 | 2413.94 | 14971.80 | 16.12 | 1948.50 | 13967.74 | 13.94 |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | $\begin{aligned} & 23.89 \\ & 5.05 \\ & 21.14 \end{aligned}$ | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | $\begin{aligned} & 10.53 \\ & 4.73 \\ & 44.92 \end{aligned}$ |

Sources: Appendix I and II
The above Table 4.3 presents investment on government securities to current assets of both banks for fiscal year 2004/05 to 2008/09. Ratio percentage of

NSBIBL is $20.76,30.95,25.87,25.78,16.12$ and KBL is $8.67,6.71,5.32,17.95$ and 13.94. Average proportion of KSBIBL is 23.89 and KBL is 1053 . It means NSBIBL is most liquidity the KBL because NSBIBL has highest proportion the KBL. C.V. of NSBIBL and KBL is $21.14 \%$ and $44.92 \%$ respectively. It shows that NSBIBL is more consistent in government securities to current assets ratio than KBL.

## 4. Current Ratio:-

Current ratio indicates the availability of current assets against current liabilities. This ratio is applied to test the solvency as well as determining short term financial strength of the commercial bank.

The following table presents the current ratio of both Banks.
Table No. 4.4

## Current Assets Ratio

(Rs. in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Current <br> Assets | Current <br> Liability | Ratio <br> \% | Current <br> Assets | Current <br> Liability | Ratio <br> $\%$ |
| $2004 / 05$ | 13160.60 | 17226.21 | 0.76 | 3423.12 | 4629.02 | 0.74 |
| $2005 / 06$ | 13312.40 | 16384.73 | 0.81 | 3340.25 | 4410.46 | 0.76 |
| $2006 / 07$ | 13868.38 | 15135.42 | 0.92 | 7517.89 | 8359.46 | 0.90 |
| $2007 / 08$ | 14244.04 | 15153.13 | 0.94 | 11144.33 | 12506.94 | 0.89 |
| $2008 / 09$ | 14971.80 | 15420.82 | 0.97 | 13967.74 | 15078.84 | 0.84 |
|  | Average $(\bar{x})$ 0.88 <br>  S.D. $(\delta)$ | Average $(\bar{x})$ <br> S. | 0.84 |  |  |  |
|  | C.V. | 10.30 | S.D. $(\delta)$ | 8.77 |  |  |
| C.V. | 10.44 |  |  |  |  |  |

Source: Appendix I \& II
The above table 4.4 shows the current ratio of NSBIBL and KBL for fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is $0.76,0.81,0.92,0.94,0.97$, and KBL is $0.74,0.76,0.90,0.89$ and 0.84 for the 5 years. Average proportion of NSBIBL is $0.88 \%$ and KBL is $0.84 \%$. Higher ratio indicates better maintain of
current assets. So NSBIBL has been able to maintain safety margin to protect the interest of creditors because it has higher ratio of NSBIBL and KBL is $10.30 \%$ and $10.44 \%$ respectively. There is more fluctuation in proportion of current ratio of KBL than NSBIBL because KBL has more C.V. than NSBIBL.

### 4.2.2 Activity Ratio:-

Activities ratios are employed to evaluate the efficiency with which the firm mange and utilize its assets. Activities ratio measured the efficiency of management in utilizing assets, funds in profit generating and how available assets are utilized. This ratio is called turnover of efficient or assets utilization ratio. Activity ratio indicates the degree of efficiency in assets management hence; they are often referred to as efficiency ratios. Many ratios are computed under this heading, which are as follows:-

## 1. Loan and Advance to total Deposit ratio:-

This ratio examines to what extent commercial banks are able to utilize the depositors fund to earn profit by providing loans and advance.

The following table presents the ratio of NSBIBL and KBL.

Table No. 4.5
Loan and Advance to Total Deposit
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Loan and <br> Advance | Total <br> Deposit | Ratio <br> $\%$ | Loan and <br> Advance | Total <br> Deposit | Ratio <br> $\%$ |
| $2004 / 05$ | 7993.28 | 15839.01 | 50.47 | 2318.91 | 4256.21 | 54.48 |
| $2005 / 06$ | 7135.54 | 15506.44 | 46.02 | 2518.06 | 4174.76 | 60.32 |
| $2006 / 07$ | 7454.26 | 13447.65 | 55.43 | 5698.03 | 7922.75 | 71.29 |
| $2007 / 08$ | 7953.76 | 14119.00 | 56.33 | 6917.80 | 11524.67 | 60.03 |
| $2008 / 09$ | 10465.27 | 14586.65 | 71.75 | 9933.08 | 14254.57 | 69.68 |


|  | Average $(\bar{x})$ | 56.00 | Average $(\bar{x})$ | 63.16 |
| :--- | :--- | :--- | :--- | :--- |
|  | S.D. $(\delta)$ | 9.73 | S.D. $(\delta)$ | 7.10 |
|  | C.V. | 17.38 | C.V. | 11.24 |

Sources: Appendix I and II (A)
Table 4.5 shows that the percentages of loan and advance to total deposit ratio of two Bank for the fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is $50.47,46.02,55.43,56.33,71.75$ and Ratio of KBL is $54.48,60.32,71.29,60.03$ and 69.68. Average ratio of NSBIBL and KBL is $56 \%$ and $63.16 \%$ respectively. Here, average proportion of KBL is greater than NSBIBL. It indicates that KBL is better utilization of total deposit for investing in loans and advance then NSBIBL. C.V. of NSBIBL and Kumari BL is 17.38 and 11.24 respectively. It indicates that KBL is more consistent in loan and advances to total deposit ratio than NSBIBL because KBL has lowest C.V. them NSBIBL.

## 2. Loan and Advance to fixed deposit ratio:-

Loan and advances is that part of banks investment which generates income at a certain rate and fixed deposit is that part of bank's fund which bears cost of a certain rate, hence, this ratio indicates the relationship between the investments of bank earning interest at a fixed rate the liabilities of bank bearing interest at a certain rate. Loan and advance are primary source of income and the most profitable of all the assets of the bank. So utilization of fixed deposit in loans and advance show the greater performance.

Following table presents the ratio of NSBIBL and KBL:-

Table No. 4.6

Loan and Advance to fixed deposit
(Rs. in million)

|  | NSBIBL |  | KBL |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal | Loan and | Fixed | Ratio | Loan and | Fixed | Ratio |


| Year | advances | deposits | $\boldsymbol{\%}$ | Advance | deposit | $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 7993.28 | 3719.20 | 214.92 | 2318.91 | 1658.66 | 139.81 |
| $2005 / 06$ | 7135.54 | 2446.85 | 291.62 | 2518.06 | 945.93 | 266.12 |
| $2006 / 07$ | 7454.26 | 2252.54 | 330.93 | 5698.03 | 1672.82 | 337.64 |
| $2007 / 08$ | 7953.76 | 2310.57 | 344.23 | 6917.80 | 2294.68 | 301.47 |
| $2008 / 09$ | 10465.27 | 2078.54 | 503.49 | 9933.08 | 3212.26 | 309.22 |
|  | Average $(\bar{x})$ |  | 337.02 | Average $(\bar{x})$ |  | 270.85 |
|  | S.D.( $\delta)$ |  | 94.63 | S.D. $(\delta)$ |  | 78.33 |
|  | C.V. |  | 28.08 | C.V. |  | 28.92 |

Source: Appendix I and II
The above Table 4.6 shows that the ratio of loans and advance to fixed deposit of NSBIBL and KBL. In fiscal year 2004/05 to 2008/09 ratio of NSBIBL is 214.92, 291.62, 330.93, 344.23, 503.49 and JVK us 139.81, 266.18, 337.64, 301.47 and 309.22. Average proportion of NSBIBL is $337.02 \%$ and JVK us $270.85 \%$. NSBIBL has utilized proficiently its fixed deposit in investing loans and advance then KBL. C.V. of NSBIBL is $28.08 \%$ and KBL is $253.92 \%$. It indicates lower C.V. of NSBIBL is more consistent in utilizing the fixed deposit in loans and advance then KBL.

## 3. Loans and Advance to saving deposit Ratio:-

This ratio shows the relationship between loans and advance and saving deposit. It determine extend to which saving deposit are used in loans and advance for generating revenue to the bank.

It can be calculated and presented as below:-

Table No. 4.7

Loans and advance to saving Deposit
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal | Loan and <br> advances | Saving <br> deposits | Ratio <br> $\%$ | Loan and <br> Advance | Saving <br> deposit | Ratio <br> $\%$ |


|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 7993.28 | 4917.14 | 162.56 | 2318.91 | 1259.57 | 184.10 |
| $2005 / 06$ | 7135.54 | 4972.06 | 143.51 | 2518.06 | 1278.79 | 196.90 |
| $2006 / 07$ | 7454.26 | 5229.72 | 142.54 | 5698.03 | 2434.05 | 234.10 |
| $2007 / 08$ | 7953.76 | 5994.12 | 132.69 | 6917.80 | 4886.10 | 141.58 |
| $2008 / 09$ | 10465.27 | 7026.33 | 148.94 | 9933.08 | 6703.51 | 148.17 |
|  | Average $(\bar{x})$ |  | 146.05 | Average $(\bar{x})$ |  | 180.97 |
|  | S.D. $(\delta)$ | 9.98 | S.D. $(\delta)$ |  | 30.67 |  |
|  | C.V. |  | 6.83 | C.V. |  | 16.57 |

Source: Appendix I and II
The above Table 4.7 shows the loans and advance to saving deposit ratio of two Banks for the fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is 162.56, $143.51,142.54,132.69,148.94$ and KBL is 184.10 , 196.90, 234.10, 141.58, and 148.97. Average ratio of NSBIBL is $146.05 \%$ and KBL is $180.97 \%$. It indicates the KBL has utilized proficiency its saving deposit in investing loans and advance than NSBIBL. C.V. of NSBIBL and KBL is $9.83 \%$ and $16.57 \%$ respectively. So NSBIBL is more consistent in utilizing its saving deposit in loans and advance in KBL.

## 4. Total investment to total deposit ratio:-

This ratio measure that how successfully the banks are mobilizing their deposit on investment. Here, the investment includes total investment.

It is calculated and presented as below:-

Table No. 4.8
Total investment to total deposit

> (Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal Year | Total <br> investment | Total deposit | Ratio \% | Total investment | Total deposit | Ratio \% |
| $2004 / 05$ | 16532.48 | 15839.01 | 104.38 | 4386.61 | 4256.21 | 103 |
| $2005 / 06$ | 15646.56 | 15506.44 | 100.90 | 4372.70 | 4174.76 | 104.74 |
| $2006 / 07$ | 14435.10 | 13447.65 | 107.34 | 7503.49 | 7922.75 | 94.7 |


| $2007 / 08$ | 14922.57 | 14119.00 | 105.65 | 11288.72 | 11524.67 | 97.95 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2008 / 09$ | 15694.27 | 14586.65 | 107.00 | 14182.5 | 14254.57 | 99.99 |
|  | Average $(\bar{x})$ |  | 105.18 | Average $(\bar{x})$ |  | 99.99 |
|  | S.D. $(\delta)$ |  | 2.73 | S.D. $(\delta)$ |  | 4.01 |
|  | C.V. | 2.60 | C.V. |  | 4.01 |  |

Source: Appendix I and II (A)
The above Table 4.8 shows that the total investment to total deposit ratio of NSBIBL \& KBL for fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is 104.38, $100.90,107.34,105.69$ and 107.00 and KBL is $103.0,104,74,94.7,97.95$ and 99.99. Average ratio of NSBIBL is $105.18 \%$ and KBL is $99.99 \%$ NSBIBL is highest average ratio then KBL. It indicates that NSBIBL has utilized is total deposits for investment purpose more efficiently then KBL. C.V. of NSBIBL and KBL is $2.60 \%$ and $4.01 \%$ respectively C.V. of NSBIBL is less than KBL. So it shows that the NSBIBL is more consistent in mobilizing total deposit on investment then KBL.

### 4.2.3 Leverage Ratio:-

This ratio is calculated to judge the long-term financial position of the firm. Long-term creditors like debenture holders; financial institutions etc. are concerned with the firm's long term financial strength. The long term creditors would judge the soundness of a firm on the basis of long term financial strength measured in terms of its ability to pay the interest regularly as well as repaying the installment of the principal. It represents the long-term solvency of a firm. Leverage ratio helps to calculate the proportion of outsider and owner contribution of the firm.

## 1. Debt-Equity Ratio:-

The relationship between long term debt and owners equity is known as debt equity ratio. It is a popular measure of the long term financial solvency of the bank. Total debt includes total current liability and other differed liabilities.

The following table presents its ratio of both ranks.

Table No. 4.9
Debt-Equity Ratio
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Total <br> Debt | Net worth | Ratio \% | Total <br> Debt | Net worth | Ratio \% |
| $2004 / 05$ | 17304.32 | 1062.83 | 16.28 | 4658.29 | 469.46 | 9.93 |
| $2005 / 06$ | 16482.83 | 1146.42 | 14.38 | 43450.44 | 523.26 | 8.50 |
| $2006 / 07$ | 15248.43 | 1314.18 | 11.60 | 8375.71 | 638.53 | 11.12 |
| $2007 / 08$ | 15263.93 | 1481.68 | 10.30 | 12526.46 | 729.04 | 17.18 |
| $2008 / 09$ | 15528.70 | 1657.63 | 9.37 | 15093.90 | 1180.17 | 12.79 |
|  | Average $(\bar{x})$ | 12.39 | Average $(\bar{x})$ | 11.90 |  |  |
|  | S.D. $\delta(\delta)$ | 2.58 | S.D. $(\delta)$ | 3.39 |  |  |
|  | C.V. | 2.08 | C.V. | 2.81 |  |  |

Source: Appendix I \& II (A, B)
The above Table 4.9 indicates that debt-equity ratio of NSBIBL and KBL for fiscal year $2004 / 05$ to $2008 / 09$. The ratio of NSBIBL is $16.28,14.38,11.60$, 10.30 and 9.37 and KBL is $9.93,8.50,11.12,17.18$ and 12.79. It average proposition of NSBIBL is $12.39 \%$ and KBL is $11.90 \%$. It shows that NSBIBL is creditors claim more than those owners and KBL owners claim more than those creditors. C.V. of NSBIBL is $2.08 \%$ and KBL is $2.81 \%$ so that KBL is more risky than NSBIBL or KBL is unfavorable than NSBIBL.

## 2. Permanent Capital Structure:-

Permanent capital structure can be defined in the following two categories:-

## a. Long term debt to permanent capital ratio:-

This ratio measures the relationship between long term debts to permanent capital. Permanent capital includes Net worth and total differed liability and Long term debt includes differed liabilities.

This ratio defined the following table

Table No. 4.10
Long term Debt to permanent capital
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Long <br> term <br> Debt | Permanent <br> Capital | Ratio \% | Long <br> term <br> Debt | Permanent <br> Capital | Ratio \% |
| $2004 / 05$ | 78.11 | 1140.94 | 6.85 | 29.27 | 498.35 | 5.88 |
| $2005 / 06$ | 98.10 | 1244.52 | 7.88 | 40.23 | 563.69 | 7.13 |
| $2006 / 07$ | 113.01 | 1427.19 | 7.92 | 16.25 | 654.78 | 2.48 |
| $2007 / 08$ | 110.80 | 1592.48 | 6.96 | 19.52 | 748.56 | 2.60 |
| $2008 / 09$ | 107.88 | 1765.51 | 6.11 | 15.06 | 1195.23 | 1.27 |
|  |  | Mean $(\bar{x})$ | 7.144 |  | Mean $(\bar{x})$ | 3.87 |
|  |  | S.D.( $\delta)$ | 0.68 |  | S.D.( $\delta)$ | 2.23 |
|  |  | C.V. | 9.52 |  | C.V. | 57.62 |

Source: Appendix I \& II (B)
The above Table 4.10 shows the long term debt to permanent capital ratio of two banks for fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is 6.08, 7.80, 7.92, 6.96 and 6.11 and KBL is $5.88 \mathrm{~m} 7.19,2.48,2.60$ and 1.27. Average ratio of NSBIBL and KBL is $7.144 \%$ and $3.87 \%$ respectively. It shows that the ratio of NSBIBL is greater than KBL. So the share holder point of view, investment in share of NSBIBL is considered to satisfaction than KBL because of low cost of outside fund were used to required assets to generate return. C.V. of NSBIBL and KBL is $9.52 \%$ and $57.62 \%$ respectively. It shows the NSBIBL is more consistent or uniform.

## b. Net worth to permanent capital ratio:-

This ratio measures the proportion of firm net worth out of its total permanent capital. Permanent capital includes net worth and total differed liability.

This ratio presented by the following table:-

Table No. 4.11

Net worth to permanent capital
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Net <br> Worth | Permanent <br> Capital | Ratio <br> $\%$ | Net <br> worth | Permanent <br> Capital | Ratio <br> $\%$ |
| $2004 / 05$ | 1062.83 | 1140.94 | 93.15 | 469.46 | 498.35 | 94.12 |
| $2005 / 06$ | 1146.42 | 1244.52 | 92.12 | 523.26 | 563.69 | 92.86 |
| $2006 / 07$ | 1314.18 | 1427.19 | 92.08 | 638.53 | 654.78 | 97.51 |
| $2007 / 08$ | 1481.68 | 1592.48 | 93.04 | 729.04 | 748.56 | 97.44 |
| $2008 / 09$ | 1657.63 | 1765.51 | 93.89 | 1180.17 | 1195.23 | 60.99 |
|  | Average $(\bar{x})$ <br> S.D. $\delta)$ | 92.856 | Average $(\bar{x})$ | 88.58 |  |  |
|  | C.V. | 0.68 | S.D. $(\delta)$ | 13.91 |  |  |
|  | 0.79 | C.V. | 15.71 |  |  |  |

Source: Appendix I and II

The above Table 4.11 presents net worth to permanent capital ratio of two banks in fiscal year 2004/05 to 2008/09. Ratio percentage of NSBIBL is 93.15, 92.12, $92.08,93.04,93.89$ and KBL is 94.12, 92.86, $97.51,97.44$ and 60.99. Average proportion of NSBIBL and KBL is $92.856 \%$ and $88.58 \%$ respectively. It shows that NSBIBL is average proportion greater the KBL. It rivets that average proportion of net worth to permanent capital fevers NSBIBL more the KBL. C.V. of NSBIBL is lowest than KBL so fluctuation in net worth to total permanent capital is more than NSBIBL.

## 3. Total Debt Ratio:-

This ratio is calculated to know what proportion of total assets have been financed by outsider fund. Total debt includes total current liabilities and differed liabilities.

The following table presents the ratio of NSBIBL and KBL

Table No. 4.12

Total Debt Ratio
(Rs. in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | Total <br> Debt | Total <br> Assets | Ratio \% | Total <br> Debt | Total <br> Assets | Ratio \% |
| $2004 / 05$ | 17304.32 | 18367.15 | 94.21 | 4658.29 | 5127.37 | 90.85 |
| $2005 / 06$ | 16482.83 | 17629.25 | 93.50 | 43450.44 | 4973.90 | 89.48 |
| $2006 / 07$ | 15248.43 | 16562.61 | 92.07 | 8375.71 | 9014.24 | 92.92 |
| $2007 / 08$ | 15263.93 | 16745.61 | 91.15 | 12526.46 | 13255.50 | 94.52 |
| $2008 / 09$ | 15528.70 | 17886.33 | 90.35 | 15093.90 | 16274.07 | 92.74 |
|  | Average $(\bar{x})$ | 92.26 | Average $(\bar{x})$ | 92.10 |  |  |
|  | S.D. $\delta)$ | 1.60 | S.D. $(\delta)$ | 1.95 |  |  |
|  | C.V. | 1.73 | C.V. | 2.12 |  |  |

Sources: - Appendix I and II (G)

The above Table 4.12 shows that total debt ratio of two banks for the fiscal year 2004/05 to 2008/09. Ratio percentage of NSBIBL is 94.21, 93.50, 92.07, 91.15 and 90.35 and KBL is $90.85,89.48,92.9294 .52$ and 92.74. Average proportion of NSBIBL is $\mathrm{s} 92.26 \%$ and KBL is $92.10 \%$. High debt ratio is unfavorable as it shows that the claim of creditors is much higher than those of owners. So NSBIBL is unfavorable than KBL. C.V. of total debt ratio of NSBIBL and KBL is $1.75 \%$ and $2.12 \%$ respectively. It shows that NSBIBL is more consistent than KBL because NSBIBL has lowest C.V. than KBL.

### 4.2.4 Profitability Ratio:-

The profitability ratios are calculated to measure the operating efficiency of the bank. Bank is a business institution whose prime objective is to earn maximum profit. It is because for any business field profit is essential for its successful operation and further expression. It is the key factors that measure the earning how effectively the firm is being operated managed. Even then profit plays a fundamental role to make a firm stand strong to meet its social responsibilities. Moreover, it measures the earning the earning power and management overall effectiveness. Many ratios are determined under this heading, which are as follows.

## 1. Return on share holder equity:

This ratio is an importance measurement from the owner's point of view. It measures the return or owner fund. Share holder equity includes net worth.

The ratio is calculated and presented by following table.

Table No. 4.13

## Return on share holder equity

(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | NPAT | Share <br> holder <br> Equity | Ratio \% | NPAT | Share <br> holder <br> equity | Ratio \% |
| $2004 / 05$ | 291.37 | 1062.83 | 27.41 | 56.41 | 469.08 | 12.03 |
| $2005 / 06$ | 271.63 | 1146.42 | 23.69 | 57.10 | 523.46 | 10.91 |
| $2006 / 07$ | 416.25 | 1314.18 | 31.67 | 116.12 | 638.53 | 18.30 |
| $2007 / 08$ | 435.32 | 1481.68 | 30.73 | 152.67 | 729.04 | 20.94 |
| $2008 / 09$ | 418.63 | 1657.63 | 31.29 | 232.15 | 1180.17 | 19.67 |
|  | Average $(\bar{x})$ 28.96 <br>  S.D. $(\delta)$ <br>  C.V. | Average $(\bar{x})$ <br> S.D. | 16.37 |  |  |  |
|  |  | 11.71 | S.D. $\delta)$ | 4.59 |  |  |
| C.V. | 28.04 |  |  |  |  |  |

Source: Appendix I and II (C)

The Table 4.13 shows the return on share holder's equity of NSBIBL and KBL for fiscal year 2004/05 to 2008/09 Ratio of NSBIBL is 27.41, 23.69, 31.67, $30.73,31.29$ and KBL is $12.03,10.91,18.30,20.94$, and 19.67. Average proportion of NSBIBL is 28.96 and KBL is $16.37 \%$. it shows that NSBIBL has utilized its share holders equity more efficiency in profit generating purpose then KBL C.V of NSBIBL and KBL is $11.71 \%$ and $28.09 \%$ respectively in this ratio lowest C.V of NSBIBL more consistent to earn return on its shareholders equity than KBL.

## 2. Return on Total Assets:-

The ratio establishes the relationship between net profit and total assets. It can be presented by following table:-

Table No. 4.14
Return on Total Assets

|  | NSBIBL |  |  | KBL in million) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Fiscal <br> Year | NPAT | Total <br> Assets | Ratio \% | NPAT | Total <br> Assets | Ratio \% |  |  |  |  |
| $2004 / 05$ | 291.37 | 18367.15 | 1.59 | 56.41 | 5127.37 | 1.10 |  |  |  |  |
| $2005 / 06$ | 271.63 | 17629.25 | 1.54 | 57.10 | 4973.90 | 1.15 |  |  |  |  |
| $2006 / 07$ | 416.25 | 16562.61 | 2.51 | 116.12 | 9014.24 | 1.30 |  |  |  |  |
| $2007 / 08$ | 435.32 | 16745.61 | 2.72 | 152.67 | 13255.50 | 1.15 |  |  |  |  |
| $2008 / 09$ | 418.63 | 17886.33 | 3.02 | 232.15 | 16274.07 | 1.43 |  |  |  |  |
|  | Average $(\bar{x})$ |  |  |  |  |  |  | 2.27 | Average $(\bar{x})$ | 1.23 |
|  | S.D. $\delta)$ |  | 0.60 | S.D. $(\delta)$ | 0.12 |  |  |  |  |  |
|  | C.V. | 26.32 | C.V. | 9.87 |  |  |  |  |  |  |

Source Appendix I and II
The above Table 4.14 shows the return on table assets of two Banks for fiscal year 2004/05to 2008/09 ratio of NSBIBL is 1.59,2.51,2.72and 3.02and KBLis1.10,1.15, 1.30, 1.15, 1.43 Average return on to total assets of NSBIBL is $2.27 \%$ and KBL is $1.23 \%$ Average ratio of NSBIBL is higher than KBL so,

NSBIBL is utilized its assets more efficiency in profit generating purpose then KBL C.V of return on total assets of NSBIBL is $26.32 \%$ and KBL is $9.87 \%$ in during the study period. It shows that lower C.V of KBL is more consistent to earn profit its assets the NSBIBL.

## 3. Return on total deposit ratio:-

This ratio gives clear vision ascertains whether total deposit is being properly utilized or not return on total deposit is tabulated as follows:-

Table No. 4.15

## Return on total deposit

(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | NPAT | Total deposit | Ratio \% | NPAT | Total deposit | $\begin{aligned} & \text { Ratio } \\ & \% \end{aligned}$ |
| 2004/05 | 291.37 | 15839.01 | 18.9 | 56.41 | 4256.21 | 1.33 |
| 2005/06 | 271.63 | 15506.44 | 1.75 | 57.10 | 4174.76 | 1.37 |
| 2006/07 | 416.25 | 13447.65 | 3.10 | 116.12 | 7922.75 | 1.47 |
| 2007/08 | 435.32 | 14119.00 | 3.22 | 152.67 | 11524.67 | 1.32 |
| 2008/09 | 418.63 | 14586.65 | 3.56 | 232.15 | 14254.57 | 1.63 |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \\ & \hline \end{aligned}$ |  | 2.69 | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | 1.42 |
|  |  |  | 0.75 |  |  | 1.13 |
|  |  |  | 27.88 |  |  | 9.15 |

Source: Appendix I and II
The above Table 4.15 shows the return on total deposit on NSBIBL and KBL for fiscal year 2004/05 to 2008/09. Ratio of NSBIBL is $1.84,1.75,3.10$, 3.22, 3.56 and KBL is $1.33,1.37,1.47,1.32$, and 1.63. Average Ratio of NSBIBL is $2.69 \%$ and KBL is $1.42 \%$. Here, NSBIBL is more efficient to utilize its total deposit for profit earning purpose than KBL. C.V. of NSBIBL is $27.85 \%$ and KBL is $9.15 \%$. It shows that KBL is more uniform to earn its deposit than NSBIBL because of lowest C.V.of KBL.

## 4. Return on investment:-

This ratio is relationship between net profit after tax and total investment:-
Table No. 4.16
Return on investment

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | NPAT | Investment | Ratio <br> $\mathbf{\%}$ | NPAT | Investment | Ratio <br> $\boldsymbol{\%}$ |
| $2004 / 03$ | 291.37 | 7704.31 | 3.781 | 56.41 | 1970.27 | 2.86 |
| $2005 / 06$ | 271.63 | 8199.31 | 3.31 | 57.10 | 1822.16 | 3.13 |
| $2006 / 07$ | 416.25 | 6031.17 | 6.90 | 116.82 | 1705.24 | 6.85 |
| $2007 / 08$ | 455.32 | 5836.07 | 7.80 | 152.67 | 3862.48 | 3.95 |
| $2008 / 09$ | 518.63 | 4267.23 | 12.15 | 232.15 | 3934.19 | 5.9 |
|  |  |  |  |  | 4.53 |  |
|  | Average $(\bar{x})$ 6.79 <br> S.D. $(\delta)$  <br> C.V.  | Average $(\bar{x})$ <br> S. D. $(\delta)$ | 1057 |  |  |  |
|  |  | 46.98 | C.V. | 34.66 |  |  |

Source: - Appendix I and 2 (D)
The above Table 4.16 shows the return on Investment of NSBIBL and KBL for fiscal year 2004/05 to 2008/09. Ratio of NSBLBL is 3.78, 3.31,690,780 12.50 and KBL is 2.867, 3.13, 6.85, 3.95and 5.9 Average proportion of return of return on investment on NSBIBL and KBL is $6.79 \%$ and $4.53 \%$ respectively NSBIBL has highest average return on total investment than KBL. It means NSBIBL is more efficient to invest its fund for profit then KBL. It means NSBIBL is more efficient to invest its fund for profit generating purpose then KBL C.V. of NSBIBL has $46.98 \%$ and KBL is $34.66 \%$. It means KBL is more consistent or uniform than NSBIBL because of lowest C.V.

## 5. Earning per share (EPS)

EPS measures the earning available to on equity holders on per share basis. The earning which is eventually available for equity share holders can be retained wholly or partially

The following table represents the EPS of both banks.

Table No. 4.17
Earning per share
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | NPAT | Total No of common share | $\begin{gathered} \text { EPS (in } \\ \text { Rs) } \end{gathered}$ | NPAT | Total No. of common share | $\begin{gathered} \text { EPS (in } \\ \text { RS) } \end{gathered}$ |
| $\begin{aligned} & \hline 2004 / 03 \\ & 2005 / 06 \\ & 2006 / 07 \\ & 2007 / 08 \\ & 2008 / 09 \end{aligned}$ | $\begin{aligned} & \hline 291.37 \\ & 271.63 \\ & 416.25 \\ & 455.32 \\ & 518.63 \end{aligned}$ | $\begin{aligned} & \hline 4.9165 \\ & 4.9165 \\ & 4.9165 \\ & 4.9165 \\ & 4.9165 \end{aligned}$ | $\begin{aligned} & \hline 59.26 \\ & 55.25 \\ & 84.66 \\ & 92.61 \\ & 105.49 \end{aligned}$ | $\begin{aligned} & \hline 56.41 \\ & 57.10 \\ & 116.82 \\ & 152.67 \\ & 232.15 \end{aligned}$ | $\begin{aligned} & 1.69 \\ & 1.69 \\ & 2.95 \\ & 2.95 \\ & 5.87 \end{aligned}$ | $\begin{aligned} & 33.37 \\ & 33.78 \\ & 39.6 \\ & 51.75 \\ & 39.54 \end{aligned}$ |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  |  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | $\begin{aligned} & 39.60 \\ & 6.63 \\ & 16.76 \end{aligned}$ |

Source: Appendix I\&II
The above Table 4.17 shares the earning per share of NSBIBL KBL for fiscal year 2004/05 to 2008/09. Eps of NSBIBL is Rs 55.26, Rs 55.25, Rs 84.66, Rs 92.61 and Rs 105.49 and KBL is Rs 33.37 , Rs 33.78 , Rs 39.6 , Rs 51.75 , and Rs 39.54. Average Eps of NSBIBL is Rs 79.45 and KBL is Rs 39.6. From the above table Eps of NSBIBL has been increase gradually over the year expect in fly 2004/05. But EPS of KBL have been fluctuation NSBIBL has higher profitability on per share basic than KBL because NSBIBL's EPS higher than KBL C.V.of NSBIBL \& KBL is $24.35 \%$ and $16.76 \%$.It indicates that KBL is more consistent than NSBIBL because of lowest C.V. of KBL.

### 4.25 Other Ratio and Indicate;

Other ratio and indicators which are useful to measure the financial performance of NSBIBL and KBL are briefly described as below:-

## 1) Interest paid to interest Earned Ratio :-

This Ratio shows the proportion of interest expenses paid out of interest income:-

Two ratios of two Banks are presented below:-

Table no. 4.18
Interest paid to interest Earned
( Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Interest paid | Interest earned | Ratio \% | Interest paid | Interest earned | Ratio \% |
| 20004/05 | 578.36 | 1266.70 | 45.66 | 163.42 | 349.76 | 46.72 |
| 2005/06 | 462.80 | 1120.18 | 41.25 | 130.44 | 326.22 | 39.98 |
| 2006/07 | 317.35 | 1017.87 | 31.18 | 189.21 | 459.51 | 41.17 |
| 2007/08 | 281.94 | 1001.62 | 28.25 | 326.21 | 731.40 | 44.60 |
| 2008/09 | 243.54 | 1068.75 | 22.79 | 354.55 | 886.80 | 39.98 |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | 33.83 | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | 42.49 |
|  |  |  | 8.43 |  |  | 2.70 |
|  |  |  | 24.92 |  |  | 6.38 |

Source: - Appendix I \& II (A) (B)

The above Table 4.18 present the interest paid to interest earned ratio of NSBIBL and KBL for fly 2004/05 to 2008/09. Ratio of NSBIBL is 45.66, $41.25,31.18,28.25$ and 22.79 and KBL is 46.72 , 39.98 , $41.17,4460$ and 39.98. Average proportion of NSNIBL is $33.83 \%$ and KBL 42.49\%.It shows that NSBIBL is lowest percentage than KBL. It means KBL pays more interest to its deposition than NSBIBL because KBL has more fixed
and saving deposit in its deposit structure. C.V. of NSBIBL and KBL is $24.42 \%$ and $6.38 \%$ respectively. It shows that KBL has lowest function of interest paid to interest earned thanks NSBIBL.

## 2) Interest Earned to investment ;-

This ratio measures the percentage of interest earned form its investment. This ratio is presented by following table -

Table .No.4.19

## Total interest earned to total investment.



Source: Appendix I \& II
The above Table 4.19 shows the total interest earned to investment ratio of NSNIBL and KBL for fiscal year 2004/05 to 2008/09 It shows the ratio of NSBIBL is 16.44., 13.66, 16.88, 17.16, and 25.05 and KBL is $17.75,17.90$, 26.94, 18.93, and 22.54. Average proportion of NSBIBL is $17.84 \%$ and KBL IS $20.81 \%$ KBL is highest ratio than NSBIBL. so it indicate KBL is more consistent to earn interest on its total investment .C.v. of NSBIBL \& KBL is $21 \mathrm{~d} .36 \%$ and $16.86 \%$
respectively .it shows that KBL is more consistent to earn interest on its investment their NSBIBL .

## 3) Price earning ratio (EPR)

This ratio indicates the investors judgment about the banks performance;$\mathrm{P} / \mathrm{E}$ ratio of both selected banks are presented as below;-

Table No. 4.20
Price Earning Ratio
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | MVPS | EPS | Ratio \% | MVPS | EPS | Ratio \% |
| 20004/05 | 1500 | 59.26 | 25.31 | 1150 | 33.37 | 34.46 |
| 2005/06 | 735 | 55.25 | 13.30 | 760 | 33.78 | 22.45 |
| 2006/07 | 735 | 84.66 | 8.68 | 795 | 39.6 | 20.07 |
| 2007/08 | 1000 | 92.61 | 16.80 | 940 | 51.75 | 18.16 |
| 2008/09 | 1505 | 105.49 | 14.27 | 800 | 39.54 | 20.23 |
|  | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | 14.47 | $\begin{aligned} & \text { Average }(\bar{x}) \\ & \text { S.D. }(\delta) \\ & \text { C.V. } \end{aligned}$ |  | 23.07 |
|  |  |  | 5.76 |  |  | 5.85 |
|  |  |  | 39.81 |  |  | 25.26 |

Source: Appendix I \& II
The above Table 4.20 shows the $\mathrm{P} / \mathrm{E}$ ratio of NSBIBL and KBL for fiscal year 2004/05 to 2008/09 ratio of NSBIBL is $25.31,13.30,8.68,10.80,14.27$ and KBL is higher P/E ratio than NSBIBL. so market has positively judged in the performance of KBL. C.V. of NSBIBL is $39.81 \%$ and KBL is $25.26 \%$. This indicate that KBL is more consistent the NSBIBL.

## 4) Market value to Book value:-

This ratio measures the proportion of marker price to book value. This ratio is calculated and presented of two banks by following table:-

Table No.4.21

Market value to Book value
(Rs in million)

|  | NSBIBL |  |  | KBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> Year | MVPS | EPS | Ratio \% | MVPS | EPS | Ratio \% |
| $20004 / 05$ | 1500 | 216.17 | 6.94 | 1150 | 275.95 | 4.16 |
| $2005 / 06$ | 735 | 233.18 | 3.15 | 760 | 307.95 | 2.47 |
| $2006 / 07$ | 735 | 267.30 | 2.75 | 795 | 216.24 | 3.68 |
| $2007 / 08$ | 1000 | 301.37 | 3.32 | 940 | 246.89 | 3.80 |
| $2008 / 09$ | 1505 | 337.15 | 4.46 | 800 | 200.80 | 3.98 |
|  | Average $(\bar{x})$ |  |  |  |  |  |
|  | S.D. $\delta(\delta)$ |  | 1.52 | Average $(\bar{x})$ | 3.618 |  |
|  | C.V. | 36.89 | S.D. $(\delta)$ | 0.59 |  |  |
|  | C.V. | 16.48 |  |  |  |  |

Source: Appendix I \& II

The above Table 4.21 shows the market value to book value ratio of two bank for fiscal year 2004/05 t0 2008/09.The ratio of NSBIBL is 6.94, 3.15, 2.75, 3.32, and 4.46 and KBL id $6.94,3.15,2.75,3.32$, and 4.46 and KBL is 4.46, 2.47, 3.80 and 3.98. Average proportion of NSELB $4.12 \%$ and KBL is $3.6 \%$.It shows NSBIBL comparatively strong management and organization then KBL because of highest ratio. C.V. of NSBIBL is $36.89 \%$ and KBL is $1 \mathrm{~d} 6.48 \%$. It indicates that KBL is more consistent than NSBIBL.

## 4.3) Trend Percentage Analysis

Trend percentage analysis i8s also knows as trend ratio is an analytical device, which examines whether the financial position affirm is improving or deteriorating over the year.

In this study, this tool is used to find out direction of change of major activities such as (deposit ; net worth , investment and net profit .In comparison to first year (Base year) of study growth trend of activities for four successive years can conclusion .

In this section different types of trend percentage analysis are presented which are as follows.

1) Trend of Total Deposit
2) Trend of Net Worth
3) Trend of total investment
4) Trend of Net profit

### 4.3.1. Trend of Total Deposit

Total deposit trend of NSBIBL and KBL has been presented as under:-

Table No. 4.22

## Trend of total Deposit

(Rs in million)

|  | NSBIBL |  | KBL |  |
| :--- | :--- | :--- | :--- | :--- |
| Fiscal year | Total Deposit | Trend line <br> $(\%)$ | Total Deposit | Trend line <br> $(\%)$ |
| $2004 / 05$ | 15839.01 | $100 \%$ | 4256.21 | $100 \%$ |
| $2005 / 06$ | 15506.44 | 97.90 | 4174.76 | 98.08 |
| $2006 / 07$ | 13447.65 | 84.90 | 7922.75 | 186.14 |
| $2007 / 08$ | 144119.03 | 89.14 | 11524.67 | 270.77 |
| $2008 / 09$ | 14586.61 | 92.09 | 14254.57 | 334.91 |

Source: Appendix I\& II
Graphically trend line of total deposit is presented as below:Graph no. 1 Trend of total Deposit of NSBIBL and KBL


The above Graph 1 shows the trend percentage of total deposit of two banks form 2004/05 to 2008/09. Total deposit in comparison to the base year i.e. $100 \%$ for 5 successive year of NSBIBL is $97.90 \%, 84.90 \%$ and $92.09 \%$ and KBL is $98.08 \% 186.14 \%, 270.77 \%$ and $334.91 \%$ respectively. According to the above graph there is increasing trend of total deposit of KBL AND NSBIBL is decreasing trend. NSBIBL has gone down to lowest $84.90 \%$ and never cross the trend line of base year during the whole study period has .KBL trend line indicated that deposit.

### 4.3.2 Trend of Net worth

Trend of net worth of NSBIBL and KBL is presented as below:-

Table No. 4.23

## Trend of Net Worth

(Rs in million)

|  | NSBIBL |  | KBL |  |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal year | Net worth | Trend line <br> $(\%)$ | Net worth | Trend line <br> $(\%)$ |


| $2004 / 05$ | 1062.83 | $100 \%$ | 469.46 | $100 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| $2005 / 06$ | 1146.42 | 107.86 | 523.26 | 111.45 |
| $2006 / 07$ | 13414.18 | 123.65 | 638.53 | 136.01 |
| $2007 / 08$ | 1481.68 | 139.41 | 729.04 | 155.29 |
| $2008 / 09$ | 1657.63 | 155.96 | 1180.17 | 251.35 |

Source: - Appendix I \& II
Graphically trend line of net worth of NSBIBL \& KB is presented below:-
Graph no. 2 Trend of Network of NSBIBL \& KBL


The above Graph 2 highlights the net worth trends of two banks from fiscal year 2004/05 to 2008/09 .Net worth in comparison to the base year i.e. $100 \%$ for 5 successive year of NSIBL is $107.86,123.65 \%, 139.95,155.96 \%$ respectively and KBL is $111.455,136.015155 .29 \%$ and $251.35 \%$ respectively. It shows that net worth trend of both books are increasing comparing between NSIBL \& KBL higher trend line of KBL shows it is NSIBL.

### 4.3.3 Trend of Total Investment

Trend of total investment of NSBIBL and KBL is presented as below:-

Table No. 4.24

## Trend of Total investment

|  | NSBIBL |  | KBL |  |
| :--- | :--- | :--- | :--- | :--- |
| Fiscal year | Total <br> investment | Trend line <br> $(\%)$ | Total <br> investment | Trend line <br> $(\%)$ |
| $2004 / 05$ | 16532.48 | 100 | 438.61 | 100 |
| $2005 / 06$ | 15646.56 | 94.64 | 4372.70 | 99.68 |
| $2006 / 07$ | 14435.10 | 87.31 | 7503.49 | 171.05 |
| $2007 / 08$ | 14922.57 | 90.26 | 11288.72 | 257.34 |
| $2008 / 09$ | 156492.47 | 94.92 | 14182.5 | 323.32 |

Source: Appendix I\&II
Graphically trend lines of total investment of NSBIBL and KBL are presented as below:-

Graph No. 3 Trend of Total investment of NSBIBL and KBL.


The above Graph 3 shows the total investment trend line of two selected banks for the fiscal year 2004/01 to 2008/09 .total investment in comparison on the base year i.e. $100 \%$ for the 5 successive years of NSBIBL is $94.64 \%$,. $87.31 \%$ ,90.265 and $94.92 \%$ respectively .Trend line of KBL is 99.685 171./05\% ,257.34\%
$323.32 \%$ respectively. Trend line of KBL is increasing is one of the major function of commercial bank to earn to earn maximum income .Higher trend line of investment of KBL indicates that is improving its investment more efficiently than NSBIBL .

### 4.3.4 Trend of Net Profit :-

Trend of net profit of NSBIBL 7KBL is presented as below:-
Table No.4.25

Trend off Net profit

|  | NSBIBL |  | KBL |  |
| :--- | :--- | :--- | :--- | :--- |
| Fiscal year | Net profit | Trend line <br> $(\%)$ | Net profit | Trend line <br> $(\%)$ |
| $2004 / 05$ | 291.37 | 100 | 56.41 | 100 |
| $2005 / 06$ | 271.63 | 93.23 | 57.10 | 101.22 |
| $2006 / 07$ | 416.25 | 142.86 | 116.82 | 207.09 |
| $2007 / 08$ | 455.32 | 156.27 | 152.67 | 270.64 |
| $2008 / 09$ | 518.63 | 178 | 292.15 | 517.90 |

Sources: - Appendix I\&II
Graphically trend Lines of net profit lf NSBIBL \& KBL are presented below:Graph No. 4 Trend of net profit of NSBIBL and KBL


The above graph no. 4 highlights the trend of net profit of two selected banks form the fiscal year 2004/05 to 2008/09. It shows that NSBIBL is in increasing trend where as KBL is fluctuating the during the study period. KBL has increased to $517.90 \%$ in fiscal year 2008/09. So it is clear that the growth of net profit of KBL is better than NSBIBL.

### 4.4 Correlation Co-efficient Analysis:-

Correlation analyses measure the relationship between two or more variables. It helps us analyzing the co-variation between two or more variables .It is denoted by ' $r$ ' coefficient of correlation always lies in +1 to -1 when ' $r$ ' will be +1 there will be perfect positive correlation between two variables .when ' $r$ ' will be -1 , there will be perfect negative correlation between two variables. In this study, to find the relationship between the following variables:-

1) Total Deposit and Total investment.
2) Interest earned and Interest paid.
3) Interest Earned and operating profit.

### 4.4.1 Correlation between Total Deposit and Total investment

## a. Calculation of correlation co-efficient between total Deposit and total investment of NSBIBL.

Table No.4.26
(Rs in million)

| Fiscal year | Total deposit <br> $(\mathrm{x})$ | Total <br> investment (Y) | $\mathrm{x}=(\mathrm{x}-\bar{X})$ | $\mathrm{y}=(\mathrm{Y}-\bar{Y})$ | $\mathrm{x}_{2}$ | $\mathrm{y}^{2}$ | xy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 15839.01 | 16532.48 | 1139.26 | 1086.24 | 1297913.35 | 117917.34 | 1235709.78 |
| $2005 / 06$ | 15506.44 | 15646.56 | 806.69 | 200.32 | 650748.76 | 40128.10 | 161596.14 |
| $2006 / 07$ | 13447.65 | 14435.10 | -1252.1 | -1011.1 | 1567754.4 | 2022404.1 | 1266048.39 |
| $2007 / 08$ | 14119.03 | 14922.57 | -580.72 | -523.67 | 337235.72 | 274230.27 | 404105.64 |
| $2008 / 09$ | 14586.61 | 75694.47 | -113.14 | 248.23 | 12800.66 | 61618.13 | -28084.74 |
| Total | 73498.74 | 77231.18 |  |  | 3866452.9 | 2578297.94 | 2941175 |

Sources=Appendix I \& II
Here, $\sum X=73498.74$,

$$
\sum Y=77231.18
$$

$\mathrm{N}=5$ (No. of observation)

$$
\begin{array}{rlr}
\text { Mean }(\bar{X})=\frac{\sum X}{N} & \text { Mean }(\bar{Y})=\frac{\sum Y}{N} \\
& =\frac{73498.74}{5} & =\frac{77}{} \\
& =14699.75 & =1546.24
\end{array}
$$

Again, $\sum x^{2}=3866452.9, \sum y^{2}=2578297.44, \sum x y=2941175.21$
Now,

$$
\begin{aligned}
\text { Correlation of coefficient }(\mathrm{r})= & \frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}} \\
& =\frac{2941175.21}{\sqrt{3866452.9 \sqrt{2578297.94}}} \\
& =\frac{2941175.21}{1966.32 \times 1605.71} \\
& =\frac{2941175.21}{3157339.69} \\
& =0.932
\end{aligned}
$$

Coefficient of determination $\left(\mathrm{r}^{2}\right)=(0.932)^{2}=0.868$
b. Calculation of correlation between total deposit and total investment of HBL.

Table No. 4.27

| Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Deposit (x) | Total <br> investment <br> $(\mathrm{Y})$ | $\mathrm{x}=\mathrm{X}-\bar{X}$ | $\mathrm{y}=\mathrm{Y}-\bar{Y}$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |
| $2004 / 05$ | 4256.21 | 4386.61 | -4170.38 | -3960.19 | 17392069.34 | 15683104.84 | 16515497.2 |
| $2005 / 06$ | 4174.76 | 4372.70 | -4251.83 | -3874.1 | 18078058.35 | 15008650.81 | 16572014.6 |
| $2006 / 07$ | 7922.75 | 7503.49 | -503.84 | -843.31 | 253854.74 | 711171.75 | 424893.31 |
| $2007 / 08$ | 11524.6 | 11288.7 | 3098.08 | 2941.92 | 959809968 | 8654893.28 | 9114303.51 |
| $2008 / 09$ | 14254.5 | 14182.5 | 5827.98 | 5835.7 | 33965350.08 | 34055394.49 | 34010342.9 |
| Total | 42132.96 | 41734.02 |  |  | 79287432.19 | 74113215.17 | 76637051.48 |

Source: Appendix I \& II
Here, $\sum X=42132.96, \quad \sum Y=41734.02, \quad \mathrm{~N}=5$ (NO. of Observation)

$$
\operatorname{Mean}(\bar{X})=\frac{\sum X}{N} \quad \operatorname{Mean}(\bar{Y})=\frac{\sum Y}{N}
$$

$$
\begin{array}{ll}
=\frac{42132.96}{5} & =\frac{41734.02}{5} \\
=8426.59 & =8346.80
\end{array}
$$

Again, $\sum x^{2}=79287432.19, \sum y^{2}=74113215.17, \quad \sum x y=76637051.48$ We know that,

Correlation of coefficient $=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{y^{2}}}}$

$$
\begin{aligned}
& =\frac{76637051.48}{\sqrt{79287432.19 \sqrt{74113215.17}}} \\
& =\frac{76637051.48}{76656650.63} \\
& =0.999
\end{aligned}
$$

Coefficient determination $\left(\mathrm{r}^{2}\right)=(0.999)^{2}=0.998$
From the above calculation, it shows that correlation of coefficient between total deposit and total investment of NSBIBL \&KBL is 0.932and 0.999 respectively, so there is highly positive correlation between total deposit and total investment of two banks.

If we calculate the coefficient of determination is 0.868 of NSBIBL. It indicates $86.8 \%$ change in dependent variable (total investment) is due to change independent variable (total deposit). Similarly coefficient of determination is 0.998 of KBL. It indicates $99.8 \%$ change in dependent variable (total investment) is due to change in independent variable (total deposit).

### 4.4.2 Correlation between interest earned and interest paid.

a) Calculation of correlation between interest earned and interest paid of NABIBL.

## Table No.4.28

| (Rs. in million) |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fiscal <br> year | interest <br> earned $(\mathrm{X})$ | interest <br> paid $(\mathrm{Y})$ | $\mathrm{x}=(\mathrm{X}-$ <br> $\bar{X})$ | $\mathrm{y}=$ <br> $(\mathrm{Y}-\bar{Y})$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |


| $2004 / 05$ | 1266.70 | 578.36 | 171.68 | 201.51 | 29474.02 | 40606.28 | 34595.3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005 / 06$ | 1120.18 | 462.08 | 25.16 | 85.23 | 633.03 | 7264.15 | 2144.39 |
| $2006 / 07$ | 1017.87 | 317.35 | -77.15 | -59.5 | 5952.12 | 3540.25 | 4598.43 |
| $2007 / 08$ | 1001.62 | 212.94 | -93.41 | -93.91 | 8727.3 | 8819.09 | 8773.07 |
| $2008 / 09$ | 1068.12 | 243.54 | -26.27 | -133.3 | 690.11 | 17771.56 | 3502.05 |
| Total | 5475.12 | 1884.27 |  |  | 45476.58 | 78001.33 | 53608.9 |

Sources: Appendix I \& II
Here, $\sum X=5475.12, \sum Y=1884.17, \mathrm{~N}=5$ (No. of observation)

$$
\begin{array}{rlr}
\text { Mean }(\bar{X})= & \frac{\sum X}{N} & \text { Mean }(\bar{Y})=\frac{\sum Y}{N} \\
& =\frac{5475.12}{5} & \\
& =1095.02 &
\end{array}
$$

Again,

$$
\sum x^{2}=45476.58, \sum y^{2}=78001.33, \sum x y=5360.18
$$

We know that,

$$
\begin{aligned}
\text { Correlation Coefficient }(\mathrm{r})= & \frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}} \\
& =\frac{53605.18}{\sqrt{45467.58} \sqrt{78001.33}} \\
& =\frac{53605.18}{213.25 \times 279.29} \\
& =0.900
\end{aligned}
$$

Coefficient of determination $\left(r^{2}\right)=(0.900)^{2}=0.81$
b. Calculation of correlation between interest earned and interest paid of KBL

Table No. 4.29

| Fiscal <br> year | interest <br> earned(X) | interest <br> paid $(\mathrm{Y})$ | $\mathrm{x}=(\mathrm{X}-$ <br> $\bar{X})$ | $\mathrm{y}=$ <br> $(\mathrm{Y}-\bar{Y})$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 349.76 | 163.42 | 201 | -69.34 | 40401 | 4808.03 | 13937.32 |
| $2005 / 06$ | 326.22 | 130.44 | -224.54 | -102.3 | 50418.21 | 10469.38 | 22974.93 |
| $2006 / 07$ | 459.51 | 189.21 | -19.25 | -43.55 | 8326.56 | 1896.60 | 3973.93 |
| $2007 / 08$ | 731.40 | 326.21 | 180.64 | 93.45 | 32630.80 | 8732.90 | 16880.80 |
| $2008 / 09$ | 886.80 | 354.55 | 336.04 | 103.28 | 112922.98 | 10666.75 | 34706.21 |
|  | 2753.69 | 1163.83 |  |  | 234698.75 | 36573.66 | 92473.2 |

Source: Appendix I \& II

Here, $\sum X=2753.69, \sum Y=1163.83, \mathrm{~N}=5$ (No. of observation)

$$
\begin{array}{rlr}
\text { Mean }(\bar{X})=\frac{\sum X}{N} & \text { Mean }(\bar{Y})=\frac{\sum Y}{N} & \\
& =\frac{2753.69}{5} & \\
& =550.73 &
\end{array}
$$

Again, $\sum x^{2}=234698.75, \quad \sum y^{2}=36573.66, \sum x y=92473.21$
We know that,
Correlation of coefficient $=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}$

$$
\begin{aligned}
& =\frac{92473.21}{\sqrt{234698.75} \sqrt{36573.66}} \\
& =\frac{92473.21}{484.45 \times 191.24} \\
& =\frac{92473.21}{92647.38} \\
& =0.998
\end{aligned}
$$

Coefficient of determination $\left(\mathrm{r}^{2}\right)=(0.998)^{2}=0.996$
The above calculation shows the correlation coefficient between interest earned and interest paid of NSBIBL and KBL. Correlation co-efficient between interest earned ad interests paid of NSBBL is 0.9 . And KBL is 0.998 . It indicates that there is positive correction between interest paid and interest earned. KBL has perfectly correlated between its variable than NSBIBL.

If we calculate the co-efficient of determination is 0.81 of NSBIBL and 0.996 of KBL. It indicates $81 \%$ change in dependent variable (interest paid) is due to change in independent variable (interest earned) of NSBIBL and $99.6 \%$ change in dependent variable (interest paid) is due to change in independent variable (interest paid) of KBL.

### 4.4.3 Correlation between interest earned and operation profit:

## a. Calculation of correlation between interest earned and operating profit of NSBIBL.

Table No. 4.30

| Fiscal <br> year | interest <br> earned(X) | interest <br> paid(Y) | $\mathrm{x}=(\mathrm{X}-$ <br> $\bar{X})$ | $\mathrm{y}=$ <br> $(\mathrm{Y}-\bar{Y})$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 1266.76 | 471.72 | 171.67 | -60.21 | 29474.02 | 3625.24 | -10336.25 |
| $2005 / 06$ | 1120.9 | 409.63 | 25.16 | -122.3 | 633.03 | 14957.29 | -3077.07 |
| $2006 / 07$ | 1017.87 | 528.45 | -77.15 | -3.48 | 5952.12 | 12.11 | 268.48 |
| $2007 / 08$ | 1001.62 | 564.30 | -93.4 | 32.37 | 8723.56 | 1047.82 | -3023.36 |
| $2008 / 09$ | 1068.75 | 685.54 | -26.27 |  | 690.11 | 23596.03 | -4035.33 |
|  |  |  |  |  | 153.61 | 45472.84 | 43238.49 |
|  |  |  |  |  | -20203.53 |  |  |

Source: Appendix I \& II
Here, $\sum X=5475.12, \quad \sum Y=2659.64, \quad \mathrm{~N}=5$ (No. of observation)

$$
\begin{aligned}
\text { Mean }(\bar{X})= & \frac{\sum X}{N} & \operatorname{Mean}(\bar{Y})=\frac{\sum Y}{N} & \\
& =\frac{5475.12}{5} & & =\frac{2659.64}{5} \\
& =1095.02 & & =531.93
\end{aligned}
$$

$$
\text { Again, } \quad \sum x^{2}=45472.54, \quad \sum y^{2}=43238.49, \quad \sum x y=-20203.53
$$

We know that,

$$
\begin{aligned}
& \text { Correlation of coefficient }(\mathrm{r})=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}} \\
&=\frac{-20203.53}{\sqrt{45472.84} \sqrt{43238.49}} \\
&=\frac{-20203.53}{213.24 \times 207.94} \\
&=-0.456
\end{aligned}
$$

Correlation of determination $\left(r^{2}\right)=(0.456)^{2}=0.208$
b. Calculation of correlation between interest earned and operating profit of KBL.

Table No. 4.31

| Fiscal <br> year | interest <br> earned(X) | interest <br> paid(Y) | $\mathrm{x}=(\mathrm{X}-$ <br> $\bar{X})$ | $\mathrm{y}=$ <br> $(\mathrm{Y}-\bar{Y})$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 349.76 | 93.87 | -200.97 | -85.28 | 40388.94 | 7272.67 | 17138.72 |
| $2005 / 06$ | 326.22 | 75.01 | -224.51 | -104.14 | 50404.78 | 10845.13 | 23380.47 |
| $2006 / 07$ | 459.51 | 169.66 | -91.22 | -9.49 | 8321.08 | 90.06 | 865.68 |
| $2007 / 08$ | 371.40 | 229.7 | 180.67 | 50.55 | 32641.64 | 2555.3 | 9132.86 |
| $2008 / 09$ | 889.80 | 327.49 | 336.07 | 148.34 | 112943.1 | 22004.75 | 49852.62 |
|  | 2753.69 | 895.73 |  |  | 244699.44 | 42767.91 | 100370.3 |

Source: Appendix I \& II

$$
\begin{array}{rlrl}
\text { Here, } \sum X & =2753.69, & \sum Y=895.73, \mathrm{~N}=5 \text { (No. of observation) } \\
\text { Mean }(\bar{X})= & \frac{\sum X}{N} & \text { Mean }(\bar{Y})=\frac{\sum Y}{N} & \\
& =\frac{2753.69}{5} & & =\frac{895.73}{5} \\
& =550.73 & & =179.15
\end{array}
$$

Again, $\sum x^{2}=244699.44, \sum y^{2}=42767.91, \sum x y=100390.35$
We know that,

$$
\begin{aligned}
& \text { Correlation of coefficient }(\mathrm{r})=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}} \\
&=\frac{100390.35}{\sqrt{244695.44} \sqrt{42767.91}} \\
&=\frac{100390.35}{494.67 \times 206.80} \\
&=\frac{100390.35}{102299.75} \\
&=0.98
\end{aligned}
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.98)^{2}=0.96$
The above calculation show the correlation coefficient between interest earned and operating profit of NSBIBL is 0.456 and KBL is 0.98 . It shows that there is positive and high degree of correlation between interest earned and operating profit of KBL. But NSBIBL has negative correlation between interest earned and operating profit because interest earned of NSBIBL is in decreasing friend and operating profit is in increasing trend.

If we calculate the coefficient of determination is 0.208 of NSBIBL but NSBIBL has negative correlation of its variables so interest earned and operating
profit is not relatively correlated. Similarly coefficient of determination of KBL is 0.96. It indicates $96 \%$ change in dependent variable (operating profit) is due to change in independent variable (interest earned).

### 4.5 Regression Analysis

Regression analysis used to describe the average relationship between two variables known as simple linear regression analysis. In this study, an attempt is made to find the degree of relationship following variables:-

1. Total Deposit and Total investment.
2. Interest Eared and operating profit.

### 4.5.1 Regression equation between total deposit and total investment.

Calculation of regression equation between total deposit and total investment of NSBIBL

Table No. 4.32

| Fiscal year | Total Deposit <br> $(\mathrm{x})$ | Total <br> investment (y) | $\mathrm{x}^{2}$ | xy |
| :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 1589.01 | 16532.48 | 250874237.8 | 261858116.0 |
| $2005 / 06$ | 15506.44 | 15646.56 | 240449681.5 | 242622443.8 |
| $2006 / 07$ | 13447.65 | 14435.10 | 180839290.5 | 194118172.5 |
| $2007 / 08$ | 14119.03 | 14922.57 | 199347008.1 | 21069221.5 |
| $2008 / 09$ | 14586.61 | 15694.47 | 212769191.3 | 228929113.0 |
| Total | 73498.74 | 77231.18 | 1084279409 | 1138220059 |

Source= Appendix I\&II
Here, $\mathrm{N}=5$ (No of observations),

$$
\begin{aligned}
& \sum x=73498.74, \quad \quad \sum y=77231.18 \\
& \sum x^{2}=1084279409
\end{aligned}
$$

We know the simple regression equation y on x is

$$
\begin{equation*}
y=a+b x \tag{i}
\end{equation*}
$$

To determine the value of regression parameters $a$ and $b$ by solving the following normal equations
$\sum y=\mathrm{na}+\mathrm{b} \sum x$ (ii)
$\sum x y=\mathrm{a} \sum x+\mathrm{b} \sum x^{2}$
Putting the value of $\mathrm{n}, \sum x, \sum y, \sum x y, \sum x^{2}$ in equation (ii), \& (iii) $77231.18=5 a+73498.746$ $\qquad$ (iv)
$1138220059=73498.74 a+1084279409 b$ $\qquad$ (v)

Solving equation (iv) \& (v)
$a=4274.43$
$b=0.76$
Putting the value of $a \& b$ in equation (i)
$y=4274.43+0.76 x$
Calculation of regression equation between total deposit and total investment of KBL

Table No. 4.33
(Rs in million)

| Fiscal year | Total <br> deposit(x) | Total(y)investment |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $2004 / 05$ | 4256.21 | 4386.61 | 18115323.56 | 18670333.35 |
| $2005 / 06$ | 4174.76 | 4372.70 | 17428621.06 | 18254973.05 |
| $2006 / 07$ | 7922.75 | 7503.49 | 627669967.56 | 59448275.4 |
| $2007 / 08$ | 11524.76 | 11288.72 | 132818018.6 | 130089772.7 |
| $2008 / 09$ | 14254.57 | 14182.5 | 203192765.9 | 202165439 |
| Total | 42132.96 | 417334.02 | 434324696.7 | 428637793.5 |

Source: Appendix I \& II
Here, $n=5$ (No. of observation),

$$
\begin{array}{ll}
\sum x=42132.96, \sum y & =41734.02 \\
\sum x^{2}=434324696.7 & \sum x y=428637793.5
\end{array}
$$

We know the simple regression equation Y on x is

$$
\begin{equation*}
y=a+b x \tag{i}
\end{equation*}
$$

To determine the value of regression parameters a \& b by solving the following normal equations:-

$$
428637793.5=42132.96 a+434324696.7 \text { b -----(v) }
$$

Solving equation (iv) \& (v)

$$
\begin{gathered}
a=167.32 \\
b=0.970
\end{gathered}
$$

Putting the value of $a \& b$ in equation (i)

$$
y=167.32+0.970 x
$$

The above calculation shows that $\mathrm{a}=4274.73$ and $\mathrm{b}=0.76 \mathrm{x}$ in NSBIBL and $\mathrm{a}=$ 167.32 and $\mathrm{b}=0.970 \mathrm{x}$ in KBLD which indicates, if total deposit increases by 4274.73 million than total investment increase by 0.76 million of NSIBIBL, if total deposit increase by 167.32 million than total investment increase by 0.970 million of KBL.

### 4.5.2 Regression Equation between Interest Earned and operating profit.

Calculation of Regression Equation interest Earned and operating profit of NSBIBL

Table No. 4.34

|  |  |  |  | (Rs in million) |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Fiscal year | interest earned <br> $(\mathrm{x})$ | Operating <br> profit (Y) | $\mathrm{x}^{2}$ | xy |  |

$$
\begin{align*}
& \sum y=\mathrm{na}+\mathrm{b} \sum x  \tag{ii}\\
& \sum x y=\mathrm{a} \sum x+\mathrm{b} \sum x^{2} \\
& \text { Putting the value of } \mathrm{n} \sum x, \sum y, \sum x^{2}, \sum x y \text { in eq- (ii) \& (iii) } \\
& 41734.02=5 \mathrm{a}+42132.96 \mathrm{~b}-----------(i v)
\end{align*}
$$

| $2004 / 05$ | 1266.70 | 471.72 | 1604528.89 | 597527.72 |
| :--- | :--- | :--- | :--- | :--- |
| $2005 / 06$ | 1120.18 | 409.63 | 1254803.23 | 458859.33 |
| $2006 / 07$ | 1017.87 | 528.45 | 1036059.34 | 537893.4 |
| $2007 / 08$ | 1001.62 | 564.30 | 1003242.62 | 565214.17 |
| $2008 / 09$ | 1068.75 | 685.54 | 1142226.56 | 732670.87 |
| Total | 5475.12 | 2659.64 | 6040860.64 | 2892165.50 |

Sources: Appendix I \& II
Here, $\mathrm{n}=5$ (No. of observation )

$$
\begin{aligned}
\sum x & =5475.12, \sum y & =2659.64 \\
\sum x^{2} & =604860.64 \quad \sum x y & =2892165.50
\end{aligned}
$$

We know the simple regression equation y on x is

$$
y=a+b x----(i)
$$

To determine the value of regression parameters a \& b by solving the following normal equations: -
$\sum y=\mathrm{na}+\mathrm{b} \sum x$ $\qquad$
$\sum x y=\mathrm{a} \sum x+\mathrm{b} \sum x^{2}$ $\qquad$
Putting the value of $\mathrm{n}, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) \& (iii) $2659.64=$ $5 a+5475.12 b---(i v)$
$2892165.50=5475.12 \mathrm{a}+6040860.64 \mathrm{~b}$
Solving equation (iv) \& (v)

$$
\begin{aligned}
& a=1013.74 \\
& b=0.44
\end{aligned}
$$

Putting the value of $\mathrm{a} \& \mathrm{~b}$ in equation (i)

$$
\mathrm{y}=1013.74-0.44 \mathrm{x}
$$

Calculation of Regression Equation between interest earned and operating profit of KBL

## Table No .4.35

|  | (Rs. in million) |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Fiscal year | interest earned <br> (x) | Operating <br> profit (y) | $\mathrm{x}^{2}$ | xy |
| $2004 / 05$ | 349.76 | 93.87 | 122332.05 | 32831.97 |
| $2005 / 06$ | 326.22 | 75.01 | 106419.48 | 24469.77 |
| $2006 / 07$ | 459.51 | 169.66 | 211149.44 | 77960.47 |
| $2007 / 08$ | 731.40 | 229.7 | 534945.96 | 168002.58 |
| $2008 / 09$ | 816.80 | 327.49 | 7864143.24 | 290418.13 |
| Total | 2753.69 | 895.73 | 1761261.17 | 593682.92 |

Source: Appendix I \& II
Here, $\mathrm{n}=5 \quad$ (No. of observation )

$$
\begin{array}{lr}
\sum x=2753.69, & \sum y=895.73 \\
\sum x^{2}=1761261.17 & \sum x y=593682.92
\end{array}
$$

We know $\backslash$ the simple regression equation y on x is

$$
\begin{equation*}
y=a+b x \tag{i}
\end{equation*}
$$

To determine the value of regression parameters a \& b by solving the following normal equations:-

$$
\begin{gather*}
\sum y=\mathrm{na}+\mathrm{b} \sum x  \tag{ii}\\
\sum x y=\mathrm{a} \sum x+\mathrm{b} \sum x^{2} \tag{iii}
\end{gather*}
$$

Putting the value of $\mathrm{n}, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) $\&$ (iii)

$$
\begin{equation*}
859.73=5 a+2753.69 b \tag{iv}
\end{equation*}
$$

$\qquad$

$$
\begin{equation*}
593682.92=2753.69 a+17161261.171 b \tag{v}
\end{equation*}
$$

Solving equation (iv) \& (v)

$$
\begin{aligned}
& a=-46.76 \\
& b=0.410
\end{aligned}
$$

Putting the value of $a$ and $b$ in equation (i)
$y=-46.76+0.410 x$
The above calculation shows that $\mathrm{a}=1013.74$ and $\mathrm{b}=-0.44$ in NSBIBL and $\mathrm{a}=-46,76$ and $\mathrm{b}=0.410$ in KBL which indicates if interest earned increased by 1013.74 million then operating profit decreased by 0.44 million of NSBIBL . If interest earned decreases by 46.76 million than operating profit increased by 0.410 million of KBL .

### 4.6 Hypothesis testing with the help of T-Test

Hypothesis testing is the most importance tools of testing the significance of variables. The term 'hypothesis' refers the tentative conclusion can be testable, after setting the hypothesis / it is necessary to test the reliability of such statistical statement.

In this study, following all hypotheses is formulated to meet the objectives of research study:-

1) There is no significance difference in total deposit of two banks.
2) There is no significance difference in total investment of two banks.
3) There is no significance difference in net worth/ shareholder equity two banks.
4) There is no significance difference in net profit after tax of two banks.

### 4.6.1 Testing of Hypothesis on the basis of Total Deposit.

The following null hypothesis has been tested by the help of applying the $t$-test on the basis of total deposit of two banks.

Step 1 Hypothesis formulation
Null hypothesis $\left(\mathrm{H}_{o}\right) \mu_{1}=\mu_{2}$ (i.e. there is no significant difference in total deposit of the two banks.)

Alternative hypothesis $\left(\mathrm{H}_{A}\right) \mu_{1} \neq \mu_{2}$ (i.e. there is significant difference in total deposit of the two banks.

Step 2 Test of statistic

$$
\begin{aligned}
\mathrm{t} & =\frac{\overline{X_{1}}-\overline{X_{2}}}{\sqrt{\delta^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}} \\
& =\frac{14699.75-8426.59}{\sqrt{10394235.74\left(\frac{1}{5}+\frac{1}{5}\right)}} \\
& =\frac{6273.16}{2039.04} \quad=3.076 \\
& \therefore \mathrm{t}=3.076
\end{aligned}
$$

Working note,
Table No. 4.36

| Fiscal Year | NSBIBL $=\left(X_{1}=\right.$ Total Deposit $)$ |  | KBL $=\left(\mathrm{X}_{2}=\right.$ Total Deposit $)$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $X_{1}$ | $\left(X_{1}-\overline{X_{1}}\right)$ | $\mathrm{X}_{2}$ | $\left(\mathrm{X}_{2}-\overline{X_{2}}\right)$ |
| $2004 / 05$ | 15839.01 | 1297913.350 | 4256.21 | 17392069.34 |
| $2005 / 06$ | 15506.44 | 650748.76 | 4174.76 | 18078058.35 |
| $2006 / 07$ | 13447.65 | 1567754.41 | 7922.75 | 253854.74 |
| $2007 / 08$ | 14119.03 | 337235.72 | 11524.67 | 9598099.686 |
| $2008 / 09$ | 14586.61 | 12800.66 | 14254.57 | 33965350.88 |
| Total | 73498.78 | 3866452.9 | 42132.96 | 79287433 |

Source: Appendix I \& II

$$
\begin{array}{lr}
\text { Here, } \begin{array}{rr}
\sum X_{1}= & 73498.78 \\
\mathrm{n}_{1}=5 & \text { (no. of observation), } \mathrm{n}_{2}=5 \text { (no. of observation) } \\
\text { Mean }\left(\overline{X_{1}}\right)=\frac{\sum X_{1}}{n_{1}} & \text { Mean }\left(\overline{X_{2}}\right)=\frac{\sum X_{2}}{n_{2}} \\
& =\frac{73498.78}{5} \\
& =14699.75
\end{array} \quad=\frac{42132.896}{5} \\
\qquad
\end{array}
$$

Again, $\sum\left(X_{1}-\overline{X_{1}}\right)^{2}=3866452.9 \quad \sum\left(X_{2}-\overline{X_{2}}\right)^{2}=79287433$
Now,

$$
\begin{aligned}
\delta^{2}= & \frac{\sum\left(X_{1}-\overline{X_{1}}\right)^{2}+\sum\left(X_{2}-\overline{X_{2}}\right)^{2}}{n_{1}+n_{2}-2} \\
& =\frac{3866452.9+79287433}{5+5-2} \\
& =\frac{83153885.9}{8} \\
& =10394235.74
\end{aligned}
$$

Degree of freedom $n_{1}+n_{2}-2=5+5-2=8$ d.f.

Step-3 The tabulated value of $t$ at $5 \%$ level of significance for two tailed at 8 d.f. is 2.306.

Step-4 Decision: Here, calculated value of $t$ is more than ttabulated value.
Hence, $\mathrm{H}_{A}$ is accepted. So we conclude that there is significant difference in total deposit of the two banks.

### 4.6.2 Testing of Hypothesis on the basis of Total investment

The following null hypothesis has been tested by the heep of applying the 't' test on the basis of total investment of two banks.

Step1: Hypothesis Formulation
Null hypothesis $\left(\mathrm{H}_{0}\right)=\mu_{1}=\mu_{2}$ (i.e. there is no significance different in total investment of the two banks.

Alternative hypothesis $\left(\mathrm{H}_{A}\right): \mu_{1} \neq \mu_{2}$ (i.e. there is significance in total investment of two banks.

Step 2: Test of Statistic

$$
\mathrm{t}=\frac{\overline{X_{1}}-\overline{X_{2}}}{\sqrt{\delta^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

$$
\begin{aligned}
& =\frac{15446.24-8346.80}{\sqrt{9684541.63\left(\frac{1}{5}+\frac{1}{5}\right)}} \\
& =\frac{15446.24-8346.8}{\sqrt{3873816.66}}=3.6070
\end{aligned}
$$

$\therefore \mathrm{t}=3.6070$

Working note:

Table No. 4.37

## Total investment of NSBIBL and KBL

| Fiscal Year | NSBIBL $=\left(X_{1}=\right.$ investment $)$ |  | KBL $=\left(\mathrm{X}_{2}=\right.$ Investment $)$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $X_{1}$ | $\left(X_{1}-\overline{X_{1}}\right)$ | $\mathrm{X}_{2}$ | $\left(\mathrm{X}_{2}-\overline{X_{2}}\right)$ |
| $2004 / 05$ | 16532.48 | 1179917.34 | 43886.61 | 15683104.84 |
| $2005 / 06$ | 1664656 | 40128.10 | 4372.70 | 15793470.81 |
| $2006 / 07$ | 14436.10 | 1022404.1 | 7503.49 | 711171.75 |
| $2007 / 08$ | 14922.57 | 274320.27 | 11288.72 | 8654893.28 |
| $2008 / 09$ | 14694.47 | 61618.13 | 14182.5 | 34055394.49 |
| Total | 77231.18 | 2578297.94 | 41734.02 | 74898035.17 |

Source: Appendix I \& II
Where, $\sum X_{1}=77231.18 \quad \sum X_{2}=41734.02$ $\mathrm{n}_{1}=5$ (no. of observation), $\mathrm{n}_{2}=5$ (no. of observation) $\operatorname{Mean}\left(\overline{X_{1}}\right)=\frac{\sum X_{1}}{n_{1}} \quad \operatorname{Mean}\left(\overline{X_{2}}\right)=\frac{\sum X_{2}}{n_{2}}$
$=\frac{77231.18}{5}$
$=\frac{41734.02}{5}$

$$
=15446.24 \quad=8346.80
$$

Again,

$$
\sum\left(X_{1}-\overline{X_{1}}\right)^{2}=2578297.94 \quad \sum\left(X_{2}-\overline{X_{2}}\right)^{2}=74898035.17
$$

Now,

$$
\delta^{2}=\frac{\sum\left(X_{1}-\overline{X_{1}}\right)^{2}+\sum\left(X_{2}-\overline{X_{2}}\right)^{2}}{n_{1}+n_{2}-2}
$$

$$
=\frac{2578297.94+74898035.27}{5+5-2}=9684541.639
$$

Degree of freedom $n_{1}+n_{2}-2=5+5-2=8$ d.f.
Step-3 The tabulated value of $t$ at 5\% level of significance for two tailed at 8 d.f. is 2.306.

Step-4 Decision: Here, Calculated value of $t$ is more than tabulated value.
Hence, $H_{A}$ is accepted. So we conclude that there is significance difference in total investment of two banks.

### 4.6.3 Testing hypothesis on the basis of Net worth

The following null hypothesis has been tested by the help of applying the t-test on the basis of net worth of two banks.

Step-1 Hypothesis formulation
Null hypothesis $\left(\mathrm{H}_{0}\right)=\mu_{1}=\mu_{2}$ (i.e. there is no significance in net worth of the two banks.)

Alternative hypothesis $(\mathrm{H} A)=\mu_{1} \neq \mu_{2}$ (i.e. there is significant difference in net worth of two banks.)

Step-2: Test of statistic

$$
\begin{aligned}
\mathrm{t} & =\frac{\overline{X_{1}}-\overline{X_{2}}}{\sqrt{\delta^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}} \\
& =\frac{390.64-709.09}{\sqrt{69361.36\left(\frac{1}{5}+\frac{1}{5}\right)}} \\
& =\frac{-318.45}{166.57} \quad=-1.9118
\end{aligned}
$$

Hence $t=-1.9118$

$$
\therefore|t|=1.9118
$$

Working Note:
Table No: 4.38

## Total Net worth of NSBIBL \& KBL

(Rs. in billion)

| Fiscal Year | NSBIBL $=\left(X_{1}=\right.$ Net worth $)$ |  | KBL $=\left(\mathrm{X}_{2}=\right.$ Net worth $)$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $X_{1}$ | $\left(X_{1}-\overline{X_{1}}\right)$ | $\mathrm{X}_{2}$ | $\left(\mathrm{X}_{2}-\overline{X_{2}}\right)$ |
| $2004 / 05$ | 1062.83 | 72748.88 | 469.46 | 56944.27 |
| $2005 / 06$ | 1146.42 | 34644.38 | 523.26 | 34162.12 |
| $2006 / 07$ | 1314.18 | 337.45 | 638.53 | 4838.59 |
| $2007 / 08$ | 1481.68 | 22239.76 | 729.04 | 438.90 |
| $2008 / 09$ | 1957.63 | 105677.01 | 1180.17 | 222859.52 |
| Total | 6662.74 | 235647.48 | 3540.46 | 319243.4064 |

Sources: Appendix I \& II
Here,

$$
\begin{aligned}
& \sum X_{1}=6662.74 \quad \sum X_{2}=3540.46 \\
& \mathrm{n}_{1}=5 \text { (no. of observation), } \mathrm{n}_{2}=5 \text { (no. of observation) } \\
& \text { Mean }\left(\overline{X_{1}}\right)=\frac{\sum X_{1}}{n_{1}} \\
& =\frac{6662.74}{5} \\
& =1332.55
\end{aligned} \quad \begin{array}{lr}
\text { Mean }\left(\overline{X_{2}}\right)=\frac{\sum X_{2}}{n_{2}} & \\
& =\frac{3540.46}{5}
\end{array}
$$

Again,

$$
\sum\left(X_{1}-\overline{X_{1}}\right)^{2}=235647.48 \quad \sum\left(X_{2}-\overline{X_{2}}\right)^{2}=319243.4064
$$

Now,

$$
\begin{aligned}
& \delta^{2}= \frac{\sum\left(X_{1}-\overline{X_{1}}\right)^{2}+\sum\left(X_{2}-\overline{X_{2}}\right)^{2}}{n_{1}+n_{2}-2} \\
& \quad=\frac{235647.48+319243.4096}{5+5-2}=69361.36
\end{aligned}
$$

Degree of freedom $n_{1}+n_{2}-2=5+5-2=8$ d.f.

Step 3: The tabulated value of $|t|$ at $5 \%$ level of significance for two tailed at 8 d.f. is 2.306.

Step 4: Decision: Here calculated value of 't' is less than tabulated value.
Hence, $\mathrm{H}_{0}$ is accepted. So we conclude that there is significant difference in net worth of two banks.

### 4.6.4 Testing of Hypothesis on the basis of Net profit after Tax

The following null hypothesis has been tested by the help of applying the t-test on the basis of NPAT of two banks.

Step 1: Hypothesis formulation
Null hypothesis $\left(\mathrm{H}_{0}\right)=\mu_{1}=\mu_{2}$ (i.e. there is no significance in NPAT of the two banks.)

Alternative hypothesis $(\mathrm{H} A)=\mu_{1} \neq \mu_{2}$ (i.e. there is significant difference in NPAT of two banks.)

Step-2: Test of statistic

$$
\begin{aligned}
\mathrm{t} & =\frac{\overline{X_{1}}-\overline{X_{2}}}{\sqrt{\delta^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}} \\
& =\frac{390.64-123.05}{\sqrt{2953.685\left(\frac{1}{5}+\frac{1}{5}\right)}} \\
& =\frac{267.59}{34.3725} \quad=7.7850
\end{aligned}
$$

Hence, $\mathrm{t}=7.7850$

Working Note:
Table No. 4.39

| Fiscal Year | NSBIBL $=\left(X_{1}=\right.$ NPAT $)$ |  | KBL $=\left(\mathrm{X}_{2}=\right.$ NPAT $)$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $X_{1}$ | $\left(X_{1}-\overline{X_{1}}\right)$ | $\mathrm{X}_{2}$ | $\left(\mathrm{X}_{2}-\overline{X_{2}}\right)$ |
| $2004 / 05$ | 291.37 | 9854.53 | 56.41 | 4440.88 |
| $2005 / 06$ | 271.63 | 14163.38 | 57.10 | 4349.40 |
| $2006 / 07$ | 416.25 | 655.87 | 116.82 | 38.81 |
| $2007 / 08$ | 455.32 | 4183.50 | 152.67 | 877.34 |
| $2008 / 09$ | 518.63 | 16381.44 | 232.15 | 11902.81 |
| Total | 1953.2 | 45238.72 | 615.15 | 21609.24 |

Source: Appendix I \& II
Here,

$$
\begin{array}{cc}
\sum X_{1}=1953.2 & \sum X_{2}=615.15 \\
\mathrm{n}_{1}=5 \text { (no. of observation), } \mathrm{n}_{2}=5(\text { no. of observation })
\end{array}
$$

$$
\begin{array}{rlr}
\operatorname{Mean}\left(\overline{X_{1}}\right)=\frac{\sum X_{1}}{n_{1}} & \operatorname{Mean}\left(\overline{X_{2}}\right)=\frac{\sum X_{2}}{n_{2}} & \\
& =\frac{1953.2}{5} & \\
& =\frac{615.15}{5} \\
& =390.64 & \\
=123.05
\end{array}
$$

Again,

$$
\sum\left(X_{1}-\overline{X_{1}}\right)^{2}=45238.72 \quad \sum\left(X_{2}-\overline{X_{2}}\right)^{2}=21609.24
$$

Now,

$$
\begin{gathered}
\delta^{2}=\frac{\sum\left(X_{1}-\overline{X_{1}}\right)^{2}+\sum\left(X_{2}-\overline{X_{2}}\right)^{2}}{n_{1}+n_{2}-2} \\
=\frac{45238.72-21609.24}{5+5-2} \\
=\frac{23629.48}{8}=2953.685
\end{gathered}
$$

Degree of freedom $n_{1}+n_{2}-2=5+5-2=8$ d.f.
Step 3: The tabulated value of ' $t$ ' at $5 \%$ level of significance for two toiled at 8 d.f. is 2.306.

Step 4: Decision: Here, the calculated value of ' t ' is greater than tabulated value. Hence $\mathrm{H}_{A}$ is accepted. So, we conclude that there is significant difference in NPAT of the two banks.

## Chapter Five

Summary, Conclusion and Recommendation

### 5.1 Summary

Banks are very important segment of financial infrastructure of any country. The economic history of many countries revels that economics development and growth of financial infrastructure go hand in hand. Bank tailor made deposit facilities rightly meet our needs in today fast paced business world, ensure attractive returns to our surplus funds making our personal banking convenient and efficient thus diversifying our portfolio to best suit our investment plan. Banks vision to become a significant contributors to the economic development of the nation banks have devised various deposits loan and other facilities that suit the banking requirement of its valuable customers assisting them to cope with their personal and business requirement an end ever to grow stronger mutually.

Commercial bank has been defined as an institution which receives deposits of money or of credit card and which seeks profit through the extension and sale of its own credit. Commercial bank is an important bank which provides different services for the economic developments. The whole community derives benefit from the bank in different ways. It facilities the commerce of the country in addition to the acceptance of deposits landing and investing, they provides multiple services including accepting travelers cheques under writing, purchase and sale of securities government bonds for customers buy sale of foreign exchange, supply of timely credit and market information, providing the remittance facilities soon.

Joint venture bank in an effect of strategic alliance arrangement in which two corporation combine forces to form a co-operative partnership in order to
share risk of development to offset one is weakness with strength of order to and a like other.

This study is comparing the financial performance of two banks i.e. NSBIBL and KBL for the fiscal year 2004/05 to 2008/09. This study is organized into five sections which are introduction, review of literature, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

The first chapter of this study is "introduction." This heading deals with the general introduction, focus of study, importance of study, background of NSBIBL and KBL, statement of problem, objective of study, limitation of study, and organization of study.
"Review of literature" is second chapter of this study. This chapter covers introduction theoretical framework, concept of financial statement. Financial statement analysis, importance objective and limitation of financial statement analysis, tools of financial statement analysis, financial and statistical tools, review of book and review of thesis work.

In the study, third chapter deals introduction, research design, population and sample, sampling method, sources of data, method of data collection, tools and techniques for analysis.

The fourth chapter corers the data representation, analysis and interpretation by the help of various financial and statistical tools. This chapter is main part of the study.

In this study, fifth chapter is highlighted the summary and conclusion from the whole study. And also recommendations have been mention forwarded for the improvement of the future performance of NSBIBL and KBL.

### 5.2 Conclusion

This study is based on financial performance. The major finding or conclusion derived from the study of ratio analysis, trend analysis, correlation coefficient analysis, regression analysis and hypothesis testing are summarized as below:-

### 5.2.1 Ratio Analysis

Different types of ratio are calculated in this study. The major conclusion derived form the study of ratio analysis is summarized below:-

## a. Liquidity Ratio:

Cash and Bank balance to total deposit ratio shows the NSBIBL is better utilization of its deposit than KBL. KBL has strong liquidity position because it has highest proportion of cash and bank balance the NSBIBL. On the basis of C.V. the ratio during the study period, there is KBL is more consistent then NSBIBL.

Cash and bank balance to current ratio shows the KBL is maintaining the highest cash balance then NSBIBL. C.V. of the ratio during the study period KBL is more consistent than NSBIBL.

On the basis of investment on government securities to current assets ratio, it is found that NSBIBL is most liquidity than KBL. According to C.V. of ratio during the study period NSBIBL is more fluctuation than KBL.

After the study of current ratio of NSBIBL and KBL it has been found that NSBIBL has been able to maintain safety margin to protect the invest of creditors than KBL. C.V. of ratio during the study period NSBIBL is more fluctuation than KBL.

## b. Activity Ratio:-

On the basis of loans and advance to total deposit ratio of NSBIBL and KBL, it is found that KBL is better utilization of total deposit for investing in loans
and advance then NSBIBL. C.V. of ratio during the study period shows that KBL is more consistent then NSBIBL.

After study of loans and advance to fixed deposits ratio of NSBIBL and KBL, it shows that NSBIBL has utilized proficiently its fixed deposits in investing loans and advance than KBL. C.V. of ratio during the study period indicates NSBIBL is more consistent in utilizing its fixed deposit than KBL.

After study of loans and advance to saving deposit ratio of NSBIBL and KBL it has been found that KBL has utilized proficiently its saving deposit in investing loans advance then KBL. C.V. of ratio for during the study period shows that NSBIBL is more consistent than KBL.

On the basis of total investment to total deposit ratio of NSBIBL and KBL it has been found that NSBIBL has more utilized. It total deposit for investing purpose than KBL. C.v. of ratio during the study period it shows that NSBIBL is more consistent in mobilizing total deposit on investment than KBL.

## c. Leverage Ratio

On the basis of debt equity ratio of NSBIBL and KBL, it shows that KBL's creditors claim more those owners and NSBIBL owners claim more than those creditors. C.V. of ratio during the study period shows the KBL is more risky or unfavorable than NSBIBL.

On the basis of long term debt to permanent capital ratio of NSBIBL and KBL, it shows investment in of NSBIBL is considered to satisfaction than KBL. C.V. of ratio during the study period shows the NSBIBL is more consistent than KBL.

After study of net worth to permanent ratio of NSBIBL and KBL, it has been found average proportion of net worth to permanent capital favors the

NSBIBL more than KBL. C.V. of ratio during the study period shows the KBL fluctuates than NSBIBL.

After study of total debt of NSBIBL and KBL, it shows the KBL is unfavorable than NSBIBL and C.V. of ratio during the study period shows the KBL is more consistent than NSBIBL.

## d. Profitability Ratio:-

On the basis of return on share holder's equity ratio of NSBIBL and KBL, it has been found that NSBIBL has utilized its share holder's equity more efficiently in profit generating purpose than KBL. C.V. of ratio during the study period indicates that NSBIBL is more consistent to earn profit than KBL.

After study of return on total assets of NSBIL and KBL, it has been found NSBIBL is utilized its assets more efficiently than KBL for profit generating purpose. C.V. of ratio during the study periods indicates that KBL is more consistent to earn profit on its assets than NSBIBL.

On the basis of return on total deposit ratio of NSBIBL and KBL, it shows that NSBIBL is more efficiently to utilize its deposit for profit earning purpose than KBL. C.V. of ratio during the study period shows the KBL is more uniform to earn its deposit than NSBIBL.

On the basis of return on total investment of NSBIBL and KBL, it shows that NSBIBL is more efficient to invest its fund for profit generating purpose than KBL. C.V. ratio during the study period shows the KBL is more consistent than NSBIBL.

On the basis of EPS of NSBIBL and KBL, it shows the NSBIBL has highest profitability on per share basis than KBL because of highest EPS of

NSBIBL. C.V. of ratio during the study period shows the KBL is more consistent than NSBIBL.

## e. Other Ratio and Indicators:-

After study of interest paid to interest earned ratio of NSBIBL and KBL, it shows that KBL pay more interest to its depositors than NSBIBL because it has more fixed and saving deposit C.V. of ratio during the study period shows the KBL has lowest fluctuation than NSBIBL.

On the basis of interest earned to total investment ratio of NSBIBL and KBL, it has been found KBL has able to earn more interest on its total investment than NSBIBL. C.V. of ratio during the study period shows the KBL is more consistent to earn interest on its investment than NSBIBL.

On the basis of P/E ratio, it has been found that KBL is better than NSBIBL. C.V. of ratio during the study period shows the KBL is more consistent than NSBIBL.

On the basis of market value to book value ratio of NSBIBL and KBL; it indicates that NSBIBL comparatively strong management and organization than KBL. C.V. ratio of during the study periods shows that KBL is more consistent than NSBIBL.

### 5.2.2 Trend percentage Analysis

The major conclusions from the study of trend percentage analysis are as below:-

On the basis of trend of total deposit of NSBIBL and KBL, total deposit of NSBIBL shows the fluctuating trend through out the period under study as there is rise and fall is successive fear. Total deposit trend of KBL marked an increasing trend throughout the period under study.

After the study of net worth trend of NSBIBL and KBL, it has been revealed that net worth of NSBIBL marked an increasing trend throughout the study period. Net worth of KBL also marked an increasing trend throughout the study period. Comparing between NSBIBL and KBL, higher trend line of KBL shows, it is better than NSBIBL.

After the study of trend of total investment of NSBIBL and KBL, total investment of NSBIBL shows the fluctuation trend throughout the study period as there is rise and fall in successive year. Total investment trend of KBL is increasing during the study period.

On the basis of trend of net profit of NSBIBL and KBL, it shows that NSBIBL is in increasing trend the study period. Net profit of KBL is increasing trend during the study period. Comparing both growth rate of net profit between two banks, KBL is better than NSBIBL.

### 5.2.3 Correlation coefficient Analysis

The major conclusion from the study of correlation coefficient analysis as below:

After the study of correlation coefficient of NSBIBL and KBL between total deposit and total investment, highest co-relation between total deposit and total investment is 0.999 of KBL and lowest correlation is 0.932 of NSBIBL on the basis of coefficient of determination, it is known that $86.8 \%$ change in total investment if there is a change in total deposit of NSBIBL AND 99.8\% CHANGE IN TOTAL INVESTMENT IF THERE IS CHANGE IN TOTAL DEPOSIT OF KBL.

After the study of correlation coefficient of NSBIBL and KBL between interest earned and interest earned and interest paid is 0.998 of KBL and lowest correlation is 0.900 of NSBIBL on the basis of coefficient of determination it is
known that when there is change in interest earned it brings $81 \%$ change in interest paid of NSBIBL and $99.6 \%$ of change in interest paid of KBL.

After the study of correlation coefficient of NSBIBL and KBL between interest earned and operating profit highest correlation between interest earned and operation profit is 0.98 is KBL and negative correlation is 0.456 of NSBIBL. On the basis of coefficient of determination. It is know that when there is change in interest earned, it brings $96 \%$ change in operation profit of KBL. In case of NSBIBL it has negative correlation of its variable. So interest earned and operating profit is not relating correlated.

### 5.2.4 Regression Analysis

The major conclusion from the study of regression analysis as below:-
On the basis of regression analysis of NSBIBL and KBL between total deposit and total investment, it show regression equation of NSBIBL is $\mathrm{y}=4274.43+0.076 \mathrm{x}$ and regression equation of KBL is $\mathrm{y}=167.32+0.970 \mathrm{x}$.

On the basis of regression analysis of NSBIBL and KBL between interest earned and operation profit, it indicates regression equation of NSBIBL is $\mathrm{y}=1013.74-0.44 \mathrm{x}$ and regression equation of KBL is $\mathrm{y}=-46.76+0.410 \mathrm{x}$.

### 5.2.5 Hypothesis testing with the help of $\mathbf{t}$-test

The major conclusion from the study of hypothesis testing t-Test as below:After the testing of hypothesis on the basis of total deposit, it was found that calculated value of't' is more than tabulated value. Hence, HA is accepted. So we conclude that there is a significant difference in total deposit of the two banks.

After the testing of hypothesis on the basis of total investment, it was found that value of't' is more than tabulated value. Hence HA is accepted. So we conclude that there is a significance difference in total investment of the two banks.

After the testing of hypothesis on the basis of net worth. It was found that calculated value of $\mathrm{f}^{\prime}$ ' is less than tabulated value. Hence, $\mathrm{H}_{o}$ is accepted. So we conclude that there is a significance difference in NPAT of the two banks.

### 5.3 Recommendation

In this research study, various financial and statistical tools are used to analyze and interpret of data. So on the basis of analysis and interpretation of data the following recommendation can be advanced for improvement of future performance of two selected bank i.e. NSBIBL and KBL.

1. NSBIBL has less cash and bank balance out of its total deposit. If its depositors claim their deposit, it should not able to maintain there requirement. So, it is suggested that NSBIBL should assess the liquidity requirement and should maintain enough to meet the demand of their depositors. KBL is maintaining excess amount of cash and bank balance, which is not good for their depositors. So, it is suggested its idle fund to mobilize short term loan which matures short period.
2. NSBIBL is utilizing its assets properly in providing loan and advances in various sectors. This shows the better performance of NSBIBL in providing loan and advances but NSBIBL should be careful in recovery of loan and advances. KBL should utilize maximum part of its current assets as a loan and advance in order to maximize its profit.
3. Debt equity ratio of NSBIBL is highest than KBL. So, it is suggested to NSBIBL should attempt to decrease the debt proportion in its capital structure.
4. Return on share holder's equity of NSBIBL is highest. So, it is suggested to NSBIBL should invest productive sector yielding high return an shareholder's equity.
5. KBL has comparatively low average proportion of other profitability ratio. So, it is suggested to KBL should invest in productive sector to increase the degree of profitability.
6. Generally, higher interest coverage ratio is treated as good for banking sector. So, NSBIBL and KBL are recommended to increase its interest coverage ratio.
7. NSBIBL is earning interest at lower growth rate in comparison to its investment. So it is suggested to change their investment policy and to adopt such policy in which it can earn maximum interest.
8. Total deposit trade of NSBIBL is decreasing, which could not be healthier for the bank. So that is suggested to increase deposit collection at high rate.
9. Net profit trend of KBL show that there is lower rate of growth in net profit which could not be heal their for the bank and its shareholders. So it is suggested KBL to earn maximum profit.
10. At last, these two selected banks are profit oriented organization and they should not forget their responsibility to their customers, society and nation. So they provide their activities in village side to economic develop. Due to the establishment of other commercial banks, finance companies cooperative banks and insurance companies launching of new advance service such as Tele banking, ATM, Debit card/ credit card etc by them so it is recommended to two banks that are for providing such services in all their branches in and out from the valley.

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